

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU022823\
 Data File : VU053168.D
 Acq On : 28 Feb 2023 12:47
 Operator : JC/MD
 Sample : 01627-09 0.25PPB
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT1-2023

Quant Time: Mar 01 03:54:56 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U022723DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Wed Mar 01 03:54:45 2023
 Response via : Initial Calibration

Manual Integrations
 APPROVED

Reviewed By :Krupa Patel 03/01/2023
 Supervised By :Mahesh Dadoda 03/01/2023

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

Internal Standards						
1) Fluorobenzene	6.112	96	24557	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.633	95	9847	0.950	ug/l	0.00
Spiked Amount 1.000			Recovery	=	95.000%	
68) 1,2-Dichlorobenzene-d4	12.193	152	7637	0.929	ug/l	0.00
Spiked Amount 1.000			Recovery	=	93.000%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.862	94	873	0.224	ug/l	99
6) Chloroethane	1.936	64	877	0.211	ug/l	94
11) Allyl Chloride	2.926	41	1906	0.228	ug/l	85
12) Acrylonitrile	3.315	53	585m	0.427	ug/l	
13) Acetone	2.643	43	2948m	1.507	ug/l	
15) Methylene Chloride	3.048	84	2845	0.372	ug/l	97
18) 2-Butanone	4.727	43	2449m	1.042	ug/l	
21) 2,2-Dichloropropane	4.662	77	2671	0.237	ug/l	# 65
24) tert-Butyl Alcohol	3.244	59	1195m	2.326	ug/l	
29) 1,1-Dichloropropene	5.524	75	1750	0.210	ug/l	# 79
31) Isopropyl Ether	3.990	45	4741m	0.231	ug/l	
34) Propionitrile	4.801	54	388m	0.710	ug/l	
39) Methacrylonitrile	4.977	41	550m	0.236	ug/l	
40) Methyl acrylate	4.862	55	1173m	0.326	ug/l	
41) Tetrahydrofuran	5.074	42	711	0.622	ug/l	# 54
42) 1-Chlorobutane	5.456	56	2453	0.211	ug/l	86
45) 4-Methyl-2-Pentanone	7.800	43	3863	1.003	ug/l	96
46) t-1,4-Dichloro-2-butene	10.832	75	823m	0.424	ug/l	
47) Methyl methacrylate	6.964	69	1234	0.380	ug/l	# 96
54) 2-Hexanone	8.694	43	3191	0.973	ug/l	96
58) Tetrachloroethene	8.550	164	912	0.203	ug/l	93
64) m/p-Xylenes	9.694	106	4241	0.374	ug/l	96
72) Bromobenzene	10.784	156	1245	0.207	ug/l	95
76) 4-Chlorotoluene	11.096	126	1557	0.217	ug/l	78
80) Nitrobenzene	13.237	77	196m	0.601	ug/l	
87) 1,2,4-Trichlorobenzene	13.842	180	1784	0.231	ug/l	# 91
89) Naphthalene	14.090	128	4504	0.274	ug/l	98
90) 1,2,3-Trichlorobenzene	14.324	180	1744	0.256	ug/l	# 84

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

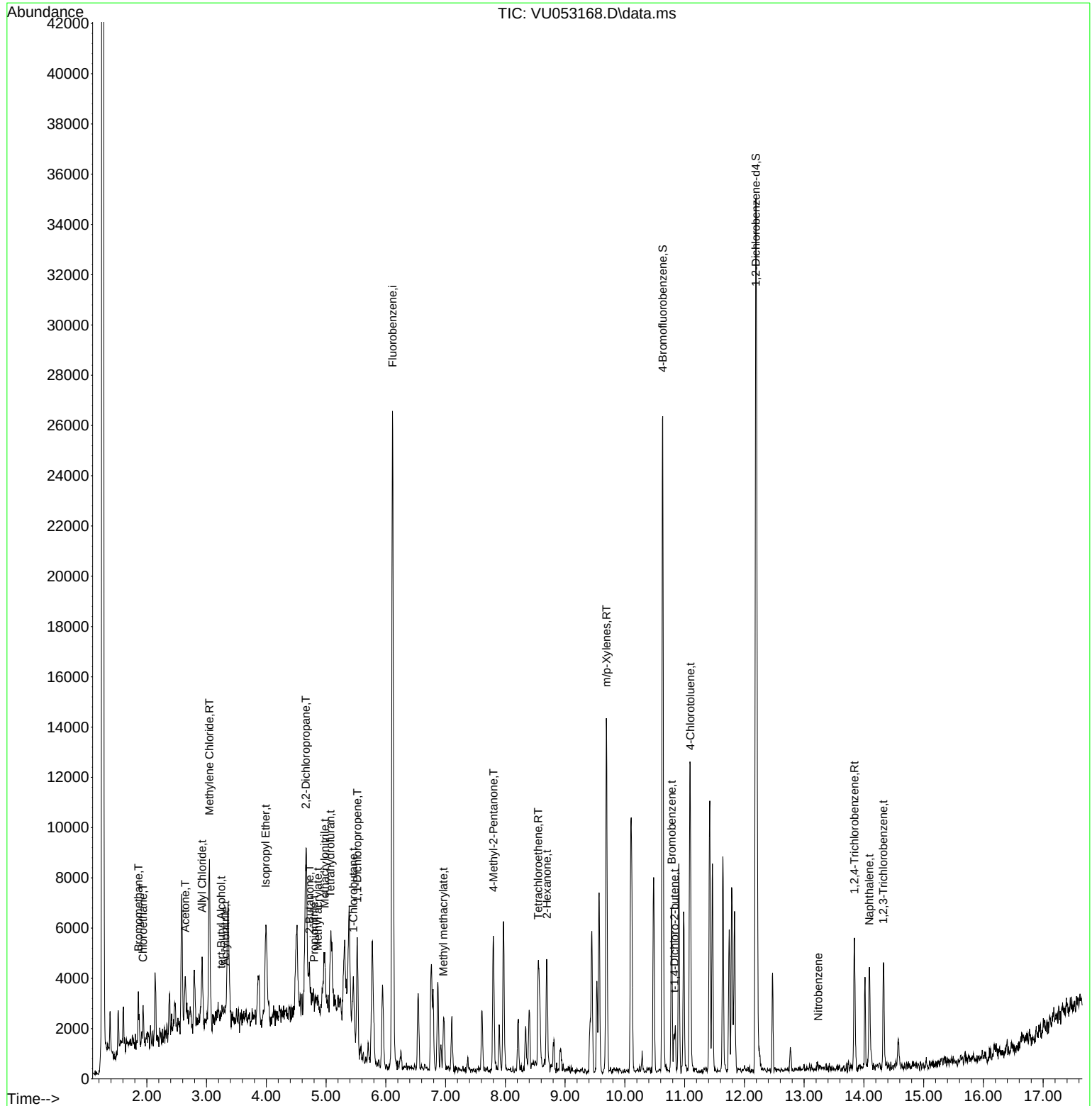
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU022823\
Data File : VU053168.D
Acq On : 28 Feb 2023 12:47
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Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 8 Sample Multiplier: 1

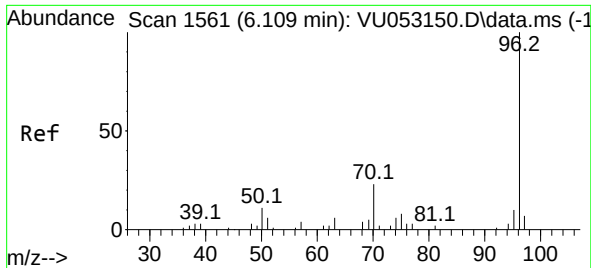
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Manual Integrations
APPROVED

Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

Quant Time: Mar 01 03:54:56 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U022723DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Wed Mar 01 03:54:45 2023
Response via : Initial Calibration





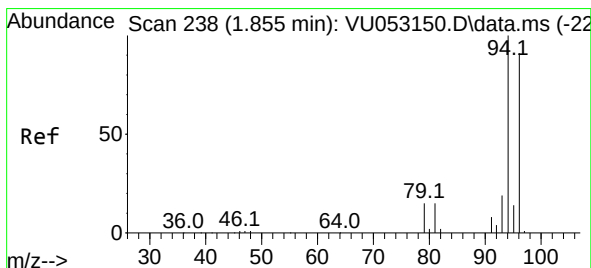
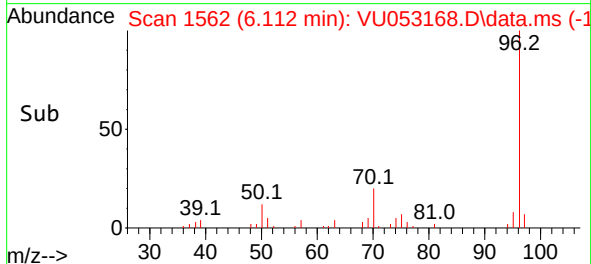
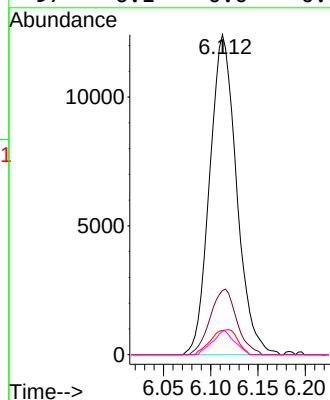
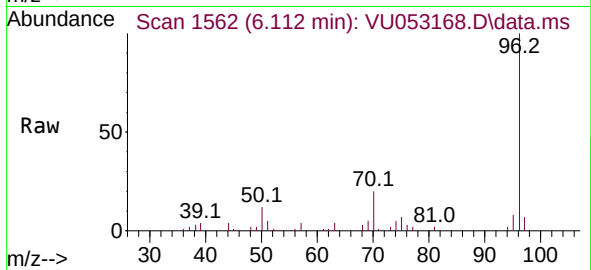
#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.112 min Scan# 1
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Tgt Ion: 96 Resp: 2455
Ion Ratio Lower Upper
96 100
70 20.3 15.5 23.3
95 7.8 7.0 10.6
97 6.1 0.0 0.0#

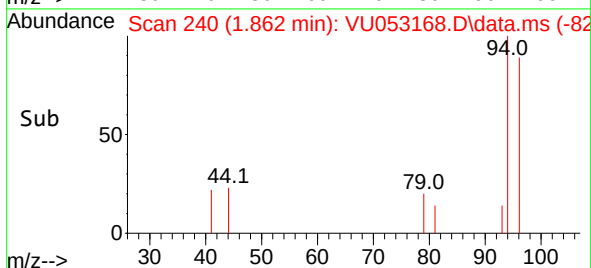
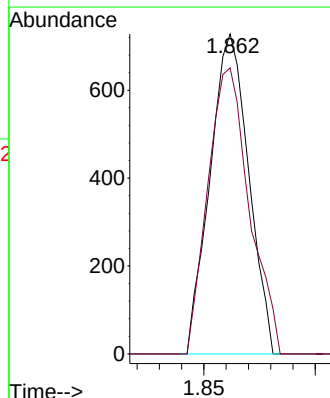
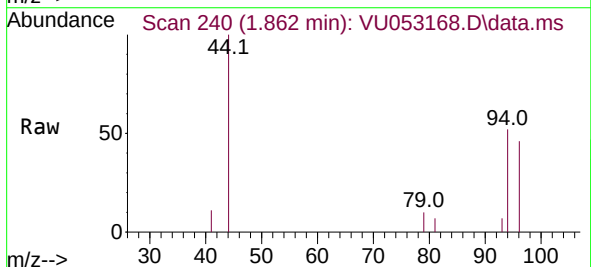
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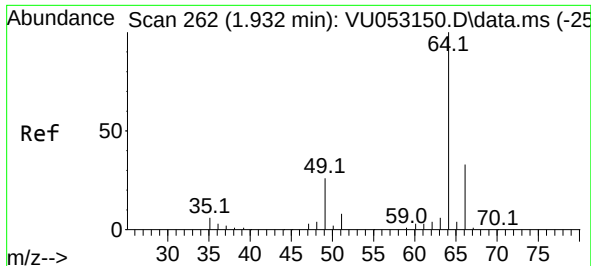
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#5
Bromomethane
Concen: 0.224 ug/l
RT: 1.862 min Scan# 240
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

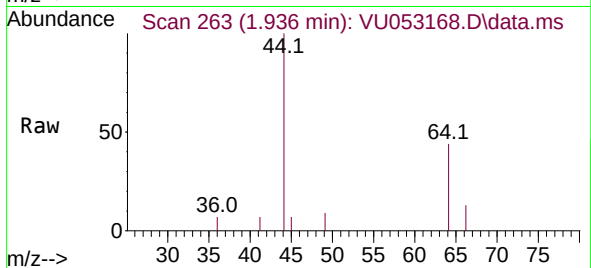
Tgt Ion: 94 Resp: 873
Ion Ratio Lower Upper
94 100
96 89.4 72.6 108.8





#6
Chloroethane
Concen: 0.211 ug/l
RT: 1.936 min Scan# 20
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

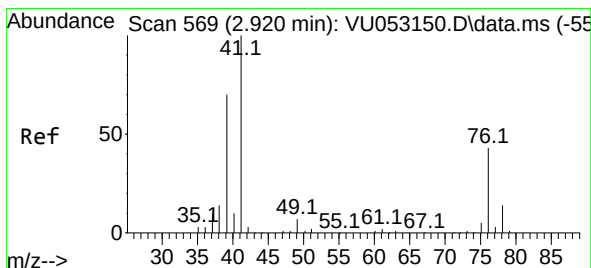
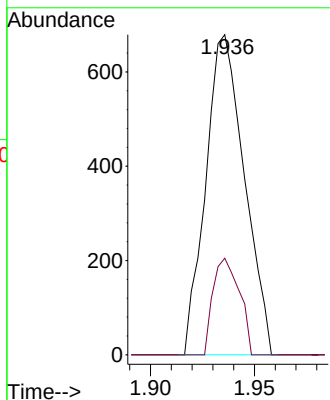
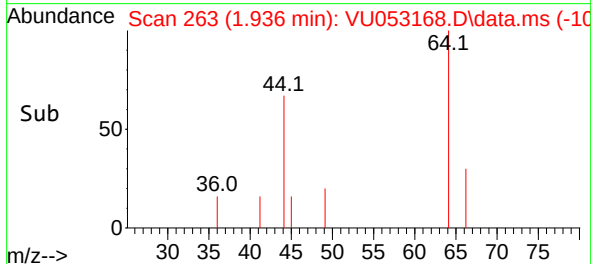
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023



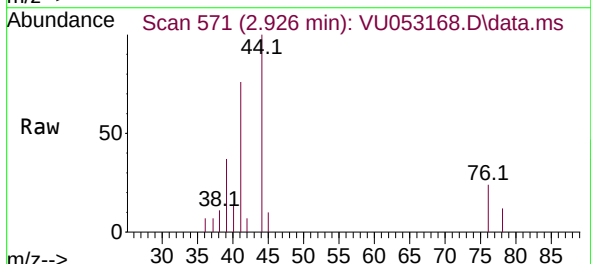
Tgt Ion: 64 Resp: 87
Ion Ratio Lower Upper
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66 30.2 26.8 40.2

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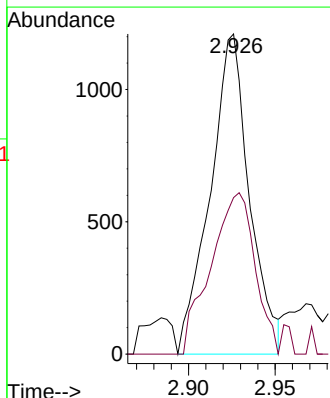
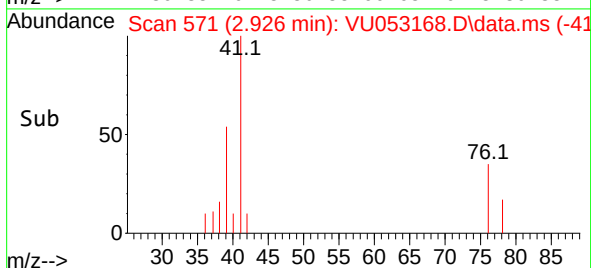
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

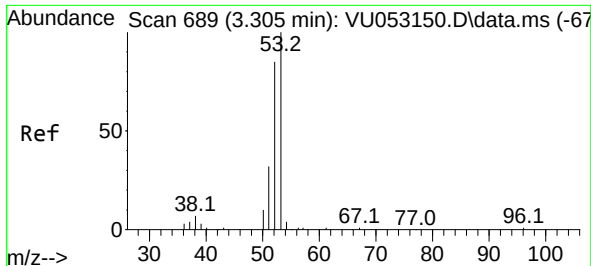


#11
Allyl Chloride
Concen: 0.228 ug/l
RT: 2.926 min Scan# 571
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47



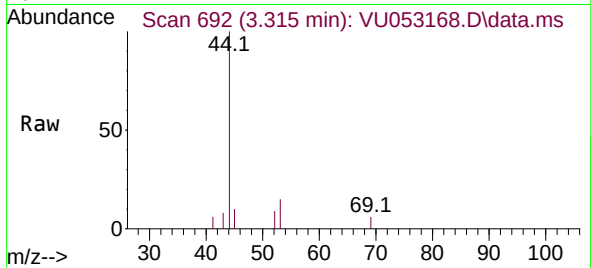
Tgt Ion: 41 Resp: 1906
Ion Ratio Lower Upper
41 100
39 56.8 55.3 82.9





#12
Acrylonitrile
Concen: 0.427 ug/l m
RT: 3.315 min Scan# 61
Delta R.T. 0.010 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

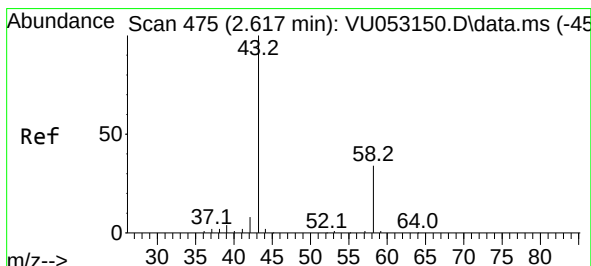
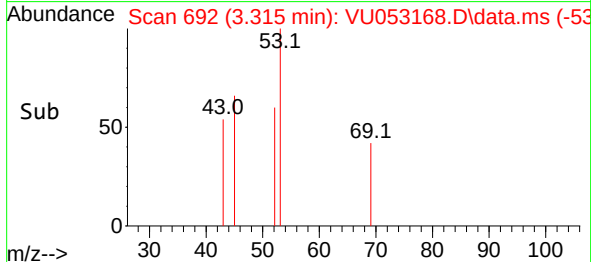
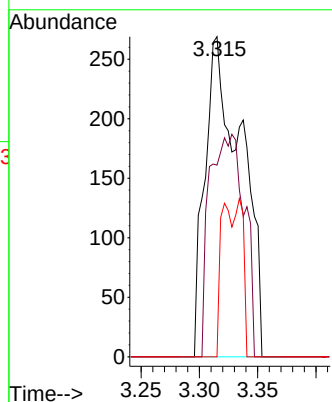
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023



Tgt Ion: 53 Resp: 589
Ion Ratio Lower Upper
53 100
52 66.0 65.9 98.9
51 15.7 31.8 47.8

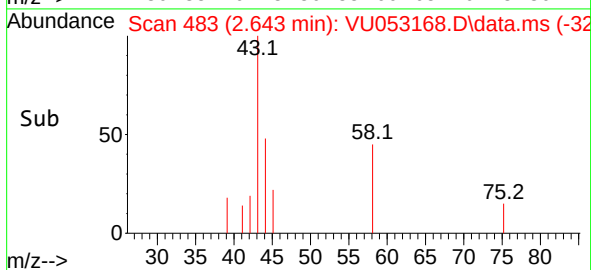
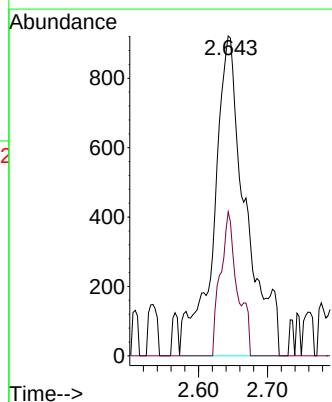
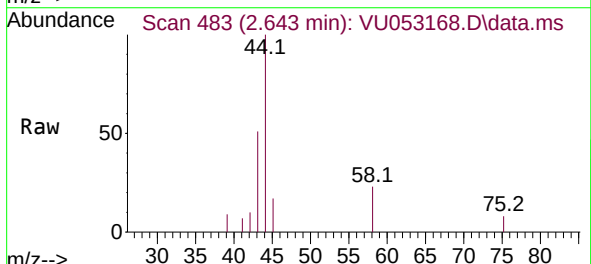
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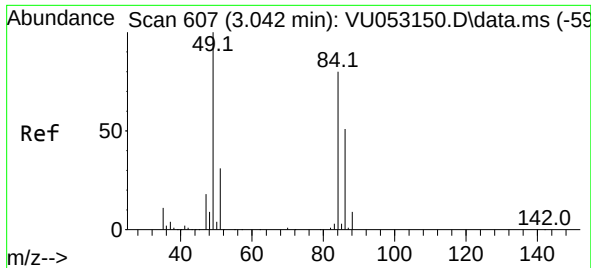
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#13
Acetone
Concen: 1.507 ug/l m
RT: 2.643 min Scan# 483
Delta R.T. 0.026 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

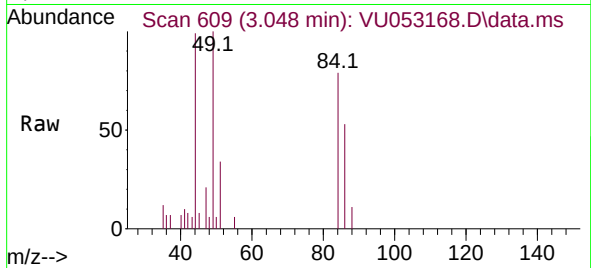
Tgt Ion: 43 Resp: 2948
Ion Ratio Lower Upper
43 100
58 45.0 27.2 40.8





#15
Methylene Chloride
Concen: 0.372 ug/l
RT: 3.048 min Scan# 607
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

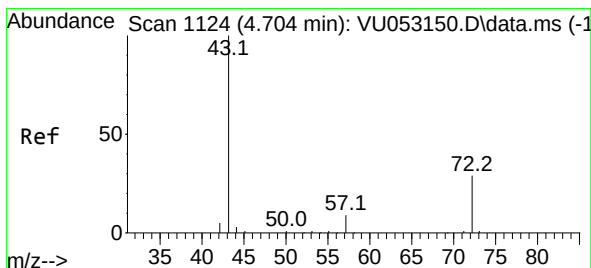
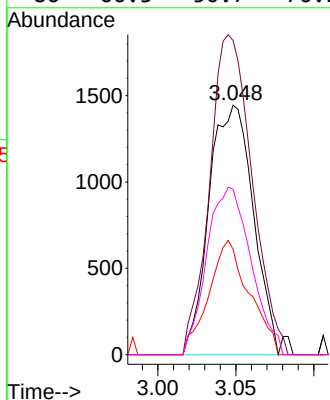
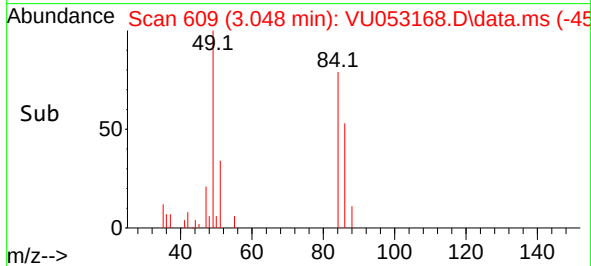
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023



Tgt Ion: 84 Resp: 2849
Ion Ratio Lower Upper
84 100
49 126.0 99.5 149.3
51 42.2 0.0 76.8
86 66.3 50.7 76.1

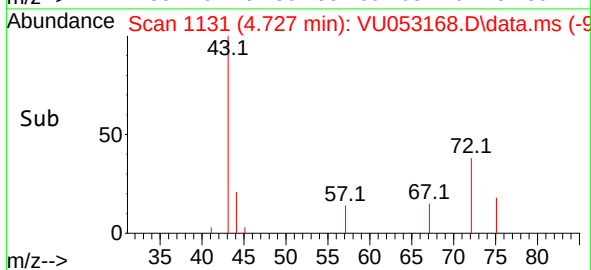
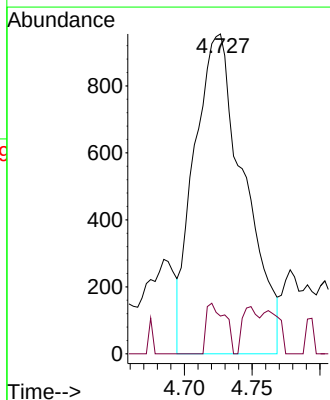
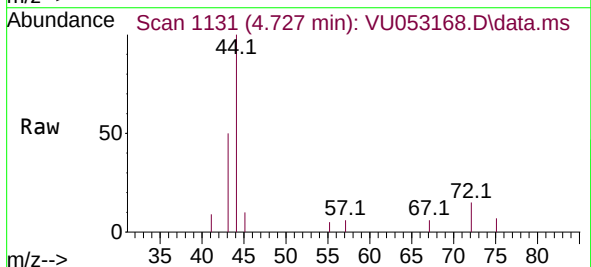
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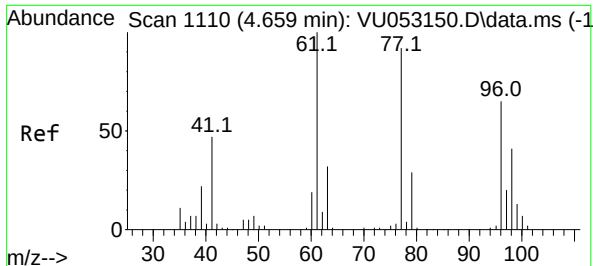
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#18
2-Butanone
Concen: 1.042 ug/l m
RT: 4.727 min Scan# 1131
Delta R.T. 0.022 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Tgt Ion: 43 Resp: 2449
Ion Ratio Lower Upper
43 100
57 11.8 0.0 17.6





#21

2,2-Dichloropropane

Concen: 0.237 ug/l

RT: 4.662 min Scan# 1111

Delta R.T. 0.003 min

Lab File: VU053168.D

Acq: 28 Feb 2023 12:47

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT1-2023

Tgt Ion: 77 Resp: 267

Ion Ratio Lower Upper

77 100

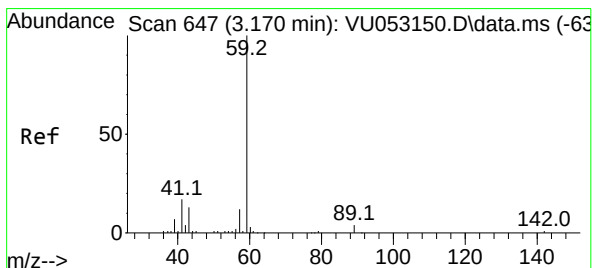
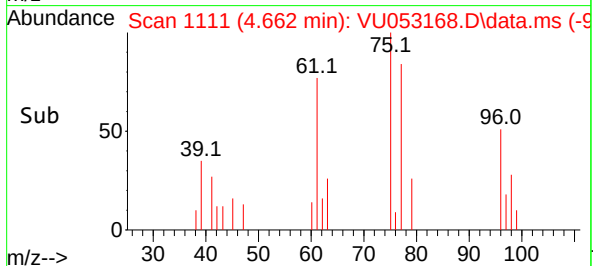
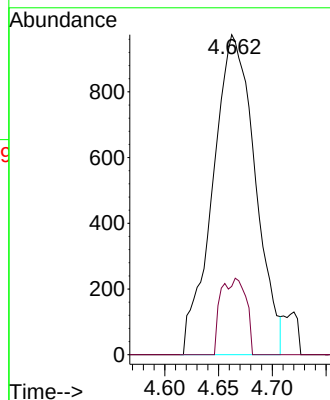
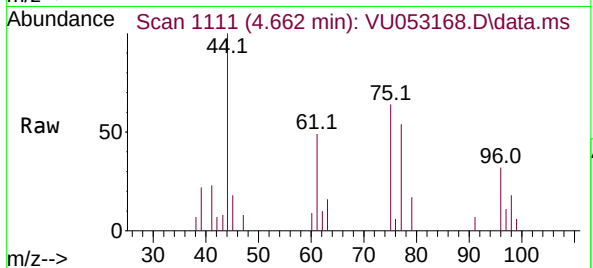
97 5.5 17.9 26.9

Manual Integrations

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Reviewed By :Krupa Patel 03/01/2023

Supervised By :Mahesh Dadoda 03/01/2023



#24

tert-Butyl Alcohol

Concen: 2.326 ug/l m

RT: 3.244 min Scan# 670

Delta R.T. 0.074 min

Lab File: VU053168.D

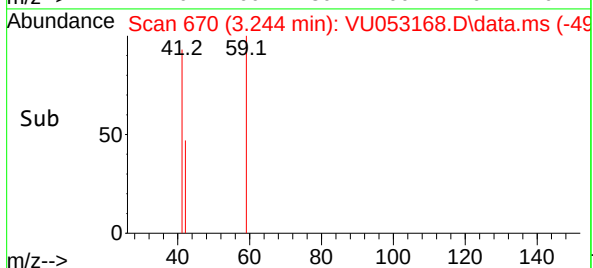
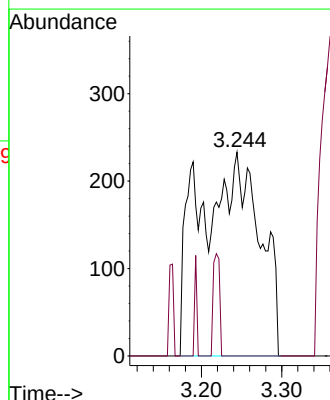
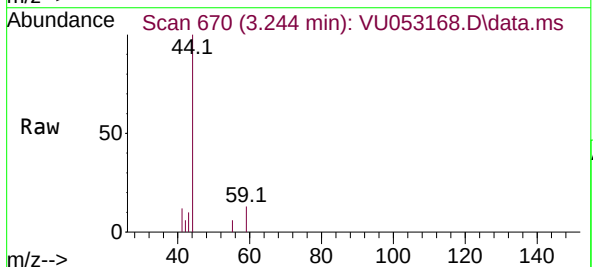
Acq: 28 Feb 2023 12:47

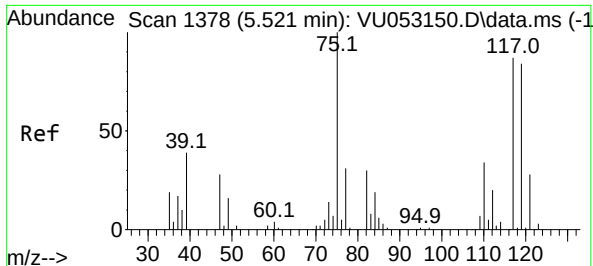
Tgt Ion: 59 Resp: 1195

Ion Ratio Lower Upper

59 100

57 3.3 8.7 13.1





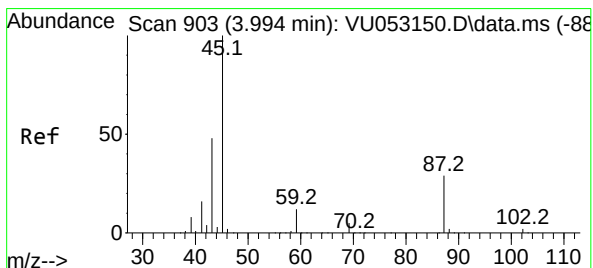
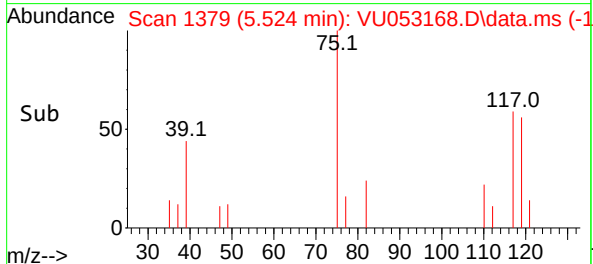
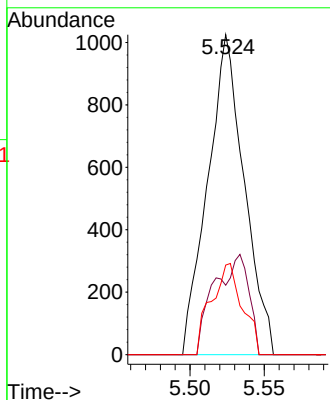
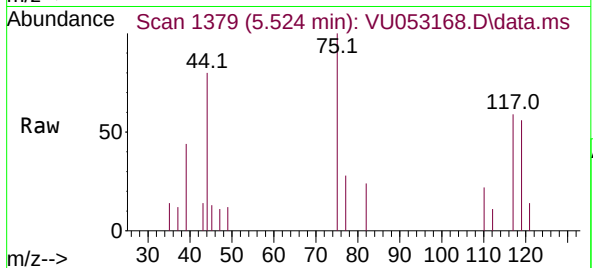
#29
1,1-Dichloropropene
Concen: 0.210 ug/l
RT: 5.524 min Scan# 1175
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Tgt Ion: 75 Resp: 1750
Ion Ratio Lower Upper
75 100
110 16.1 16.3 48.8
77 24.2 24.9 37.3

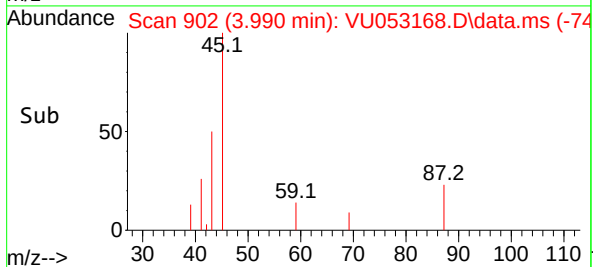
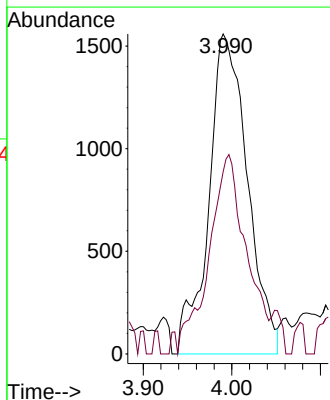
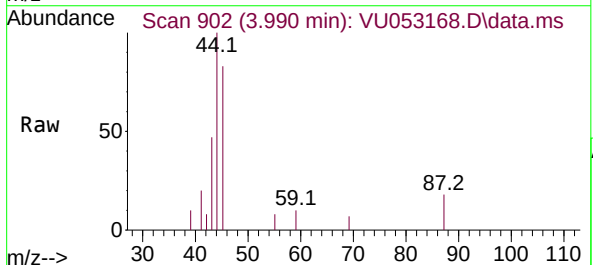
Manual Integrations
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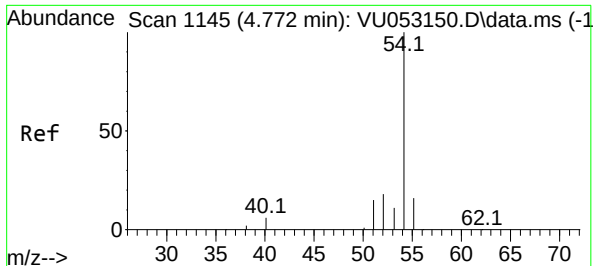
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#31
Isopropyl Ether
Concen: 0.231 ug/l m
RT: 3.990 min Scan# 902
Delta R.T. -0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

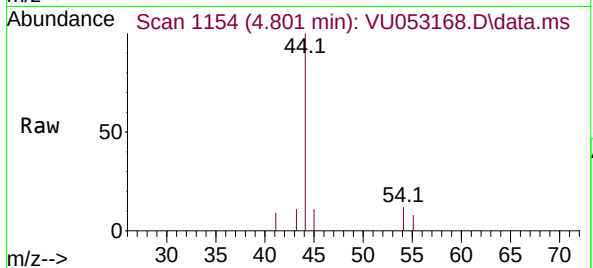
Tgt Ion: 45 Resp: 4741
Ion Ratio Lower Upper
45 100
43 59.9 24.4 73.2





#34
 Propionitrile
 Concen: 0.710 ug/l m
 RT: 4.801 min Scan# 1154
 Delta R.T. 0.029 min
 Lab File: VU053168.D
 Acq: 28 Feb 2023 12:47

Instrument : MSVOA_U
 ClientSampleId :
 MDL-WATER-03-QT1-2023

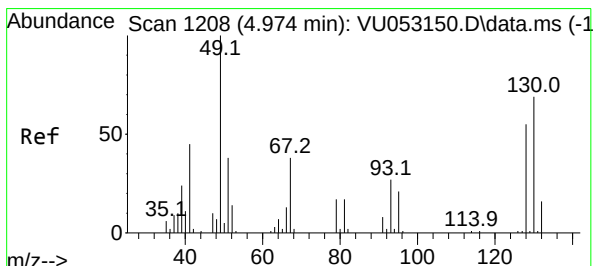
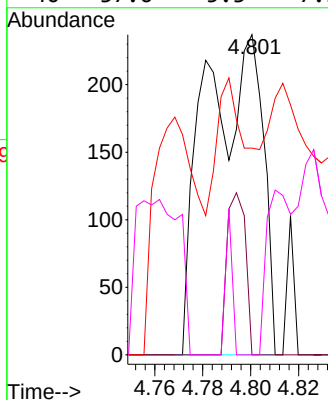
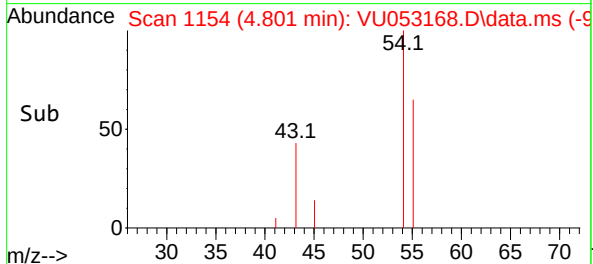


Tgt Ion: 54 Resp: 388

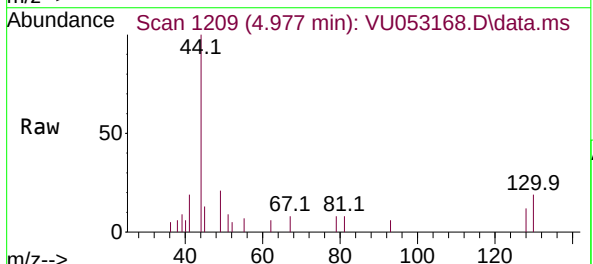
Ion	Ratio	Lower	Upper
54	100		
52	0.0	16.5	24.7
55	56.7	11.4	17.2
40	37.6	5.3	7.9

Manual Integrations
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 Supervised By :Mahesh Dadoda 03/01/2023

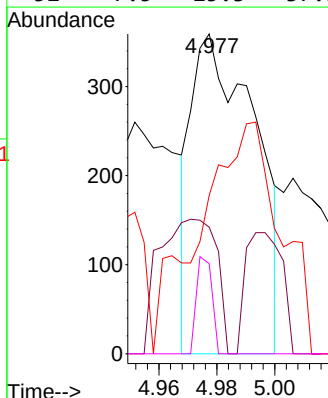
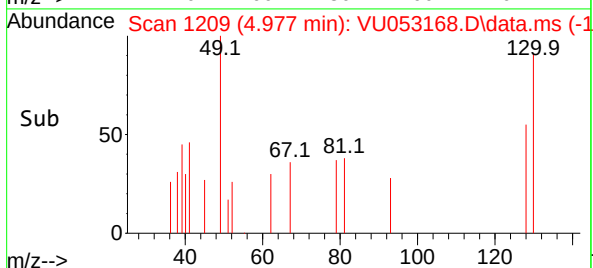


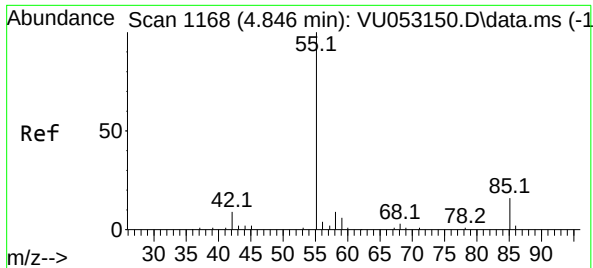
#39
 Methacrylonitrile
 Concen: 0.236 ug/l m
 RT: 4.977 min Scan# 1209
 Delta R.T. 0.003 min
 Lab File: VU053168.D
 Acq: 28 Feb 2023 12:47



Tgt Ion: 41 Resp: 550

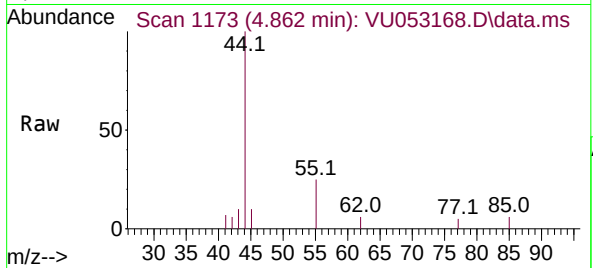
Ion	Ratio	Lower	Upper
41	100		
67	37.6	67.1	100.7
39	11.3	42.6	64.0
52	7.5	25.3	37.9





#40
Methyl acrylate
Concen: 0.326 ug/l m
RT: 4.862 min Scan# 1173
Delta R.T. 0.016 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

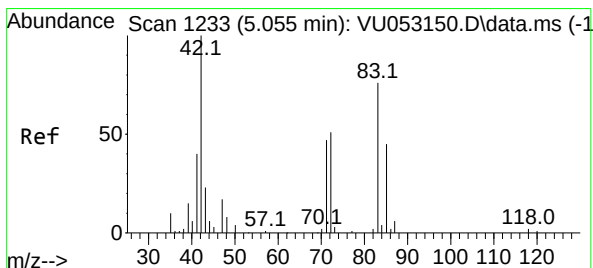
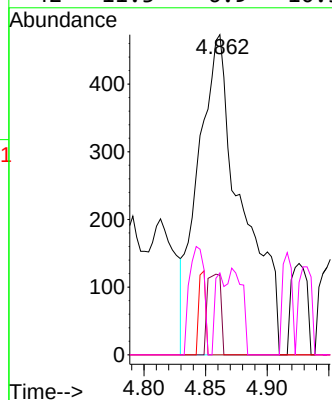
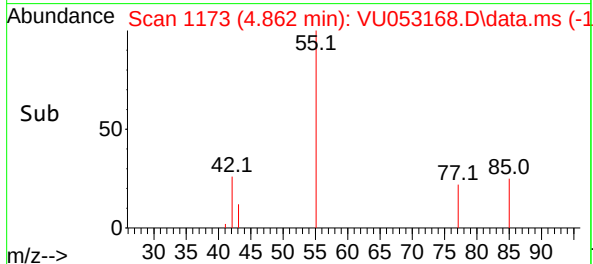
Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023



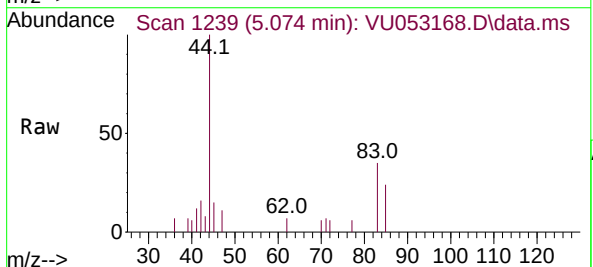
Tgt Ion	Ratio	Lower	Upper
55	100		
85	0.0	13.5	20.3
58	4.0	7.3	10.9
42	11.3	6.9	10.3

Manual Integrations
APPROVED

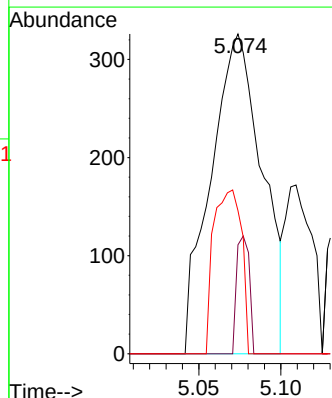
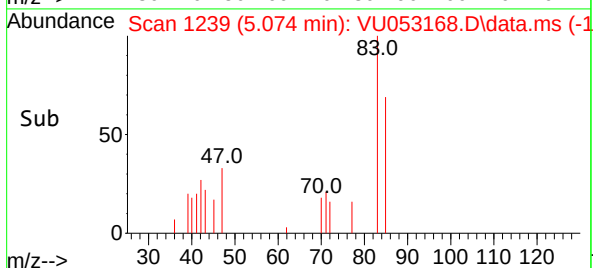
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

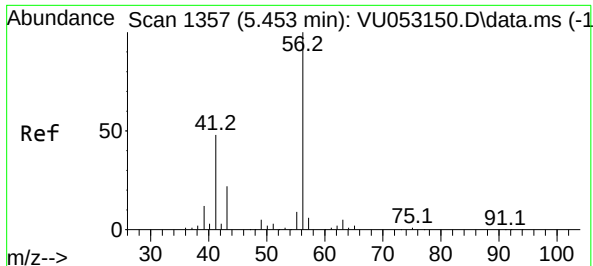


#41
Tetrahydrofuran
Concen: 0.622 ug/l
RT: 5.074 min Scan# 1239
Delta R.T. 0.019 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47



Tgt Ion	Ratio	Lower	Upper
42	100		
72	9.0	41.6	62.4
71	27.7	37.9	56.9





#42

1-Chlorobutane

Concen: 0.211 ug/l

RT: 5.456 min Scan# 11

Delta R.T. 0.003 min

Lab File: VU053168.D

Acq: 28 Feb 2023 12:47

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT1-2023

Tgt Ion: 56 Resp: 245

Ion Ratio Lower Upper

56 100

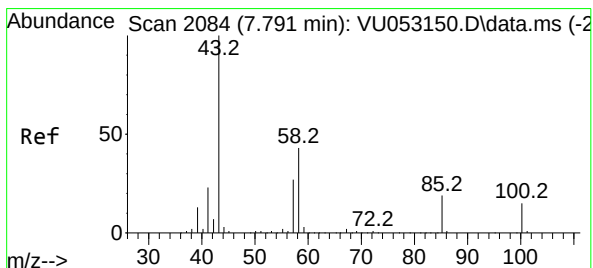
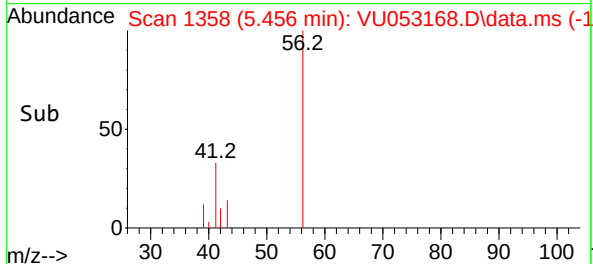
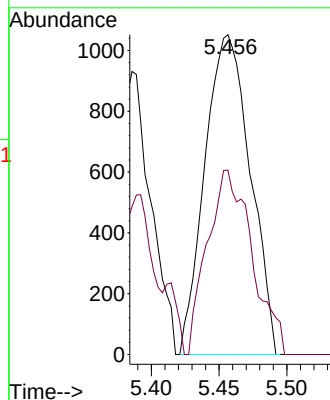
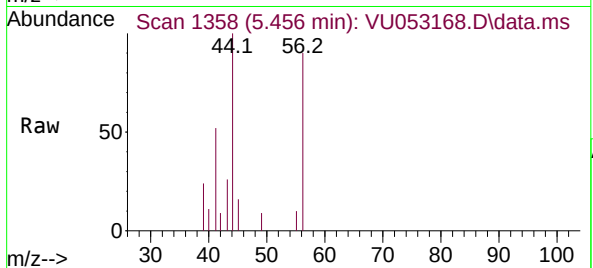
41 56.7 23.7 71.1

Manual Integrations

APPROVED

Reviewed By :Krupa Patel 03/01/2023

Supervised By :Mahesh Dadoda 03/01/2023



#45

4-Methyl-2-Pentanone

Concen: 1.003 ug/l

RT: 7.800 min Scan# 2087

Delta R.T. 0.010 min

Lab File: VU053168.D

Acq: 28 Feb 2023 12:47

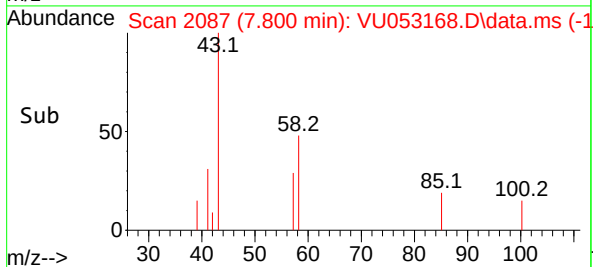
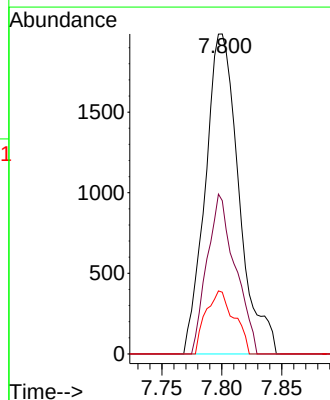
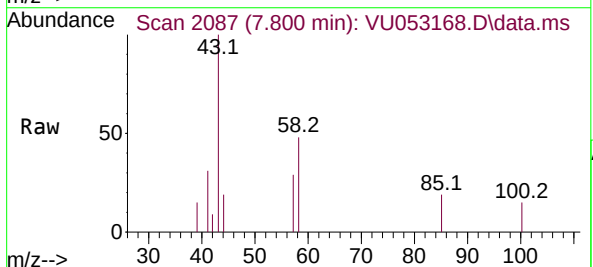
Tgt Ion: 43 Resp: 3863

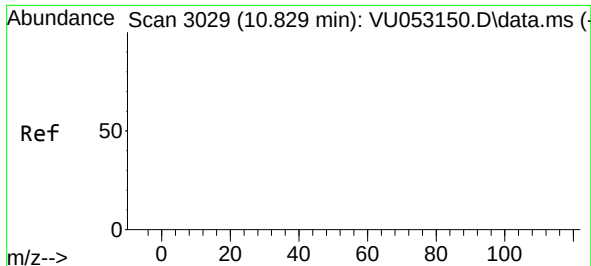
Ion Ratio Lower Upper

43 100

58 42.0 22.0 66.0

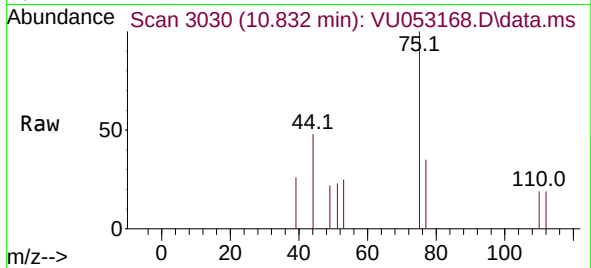
85 16.6 15.7 23.5





#46
t-1,4-Dichloro-2-butene
Concen: 0.424 ug/l m
RT: 10.832 min Scan# 3029
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

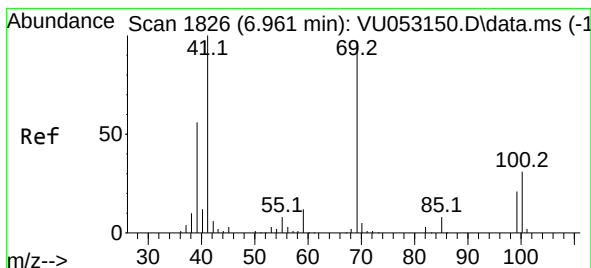
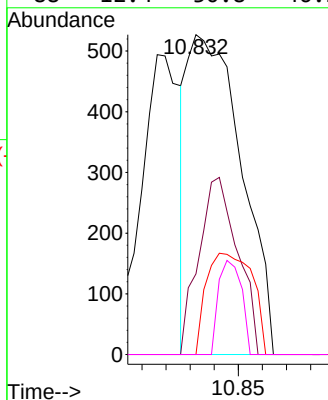
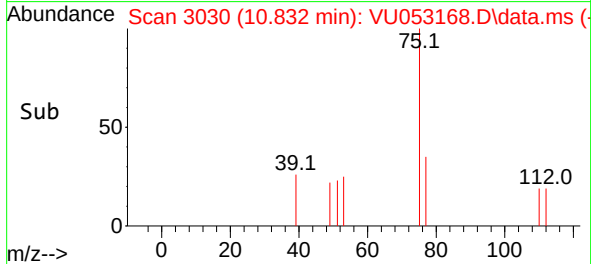
Instrument : MSVOA_U
ClientSampleId : MDL-WATER-03-QT1-2023



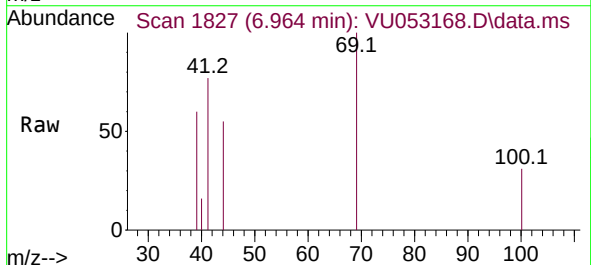
Tgt Ion: 75 Resp: 823
Ion Ratio Lower Upper
75 100
53 40.0 57.0 85.4
89 26.7 43.1 64.7
88 12.4 30.8 46.2

Manual Integrations
APPROVED

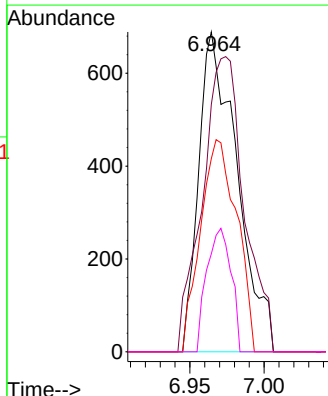
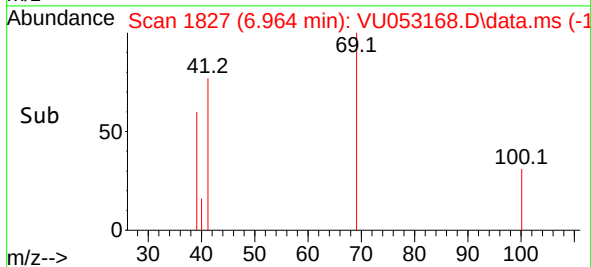
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

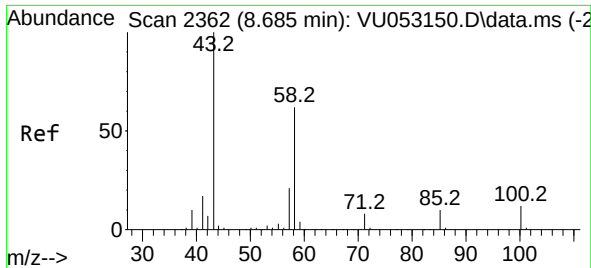


#47
Methyl methacrylate
Concen: 0.380 ug/l
RT: 6.964 min Scan# 1827
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47



Tgt Ion: 69 Resp: 1234
Ion Ratio Lower Upper
69 100
41 101.5 0.0 201.0
39 62.9 47.1 70.7
100 24.5 25.5 38.3





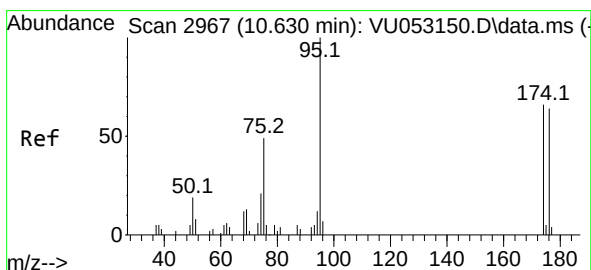
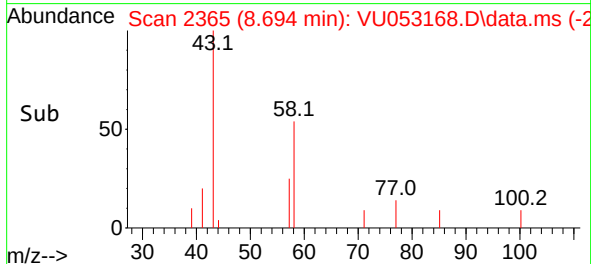
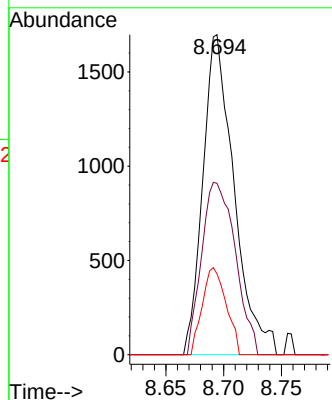
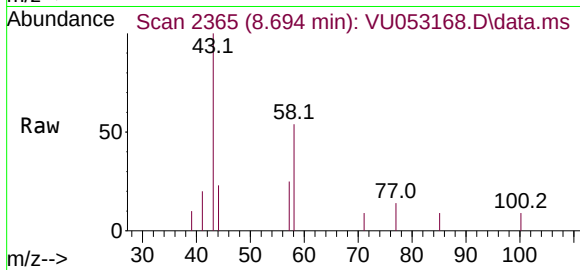
#54
2-Hexanone
Concen: 0.973 ug/l
RT: 8.694 min Scan# 219
Delta R.T. 0.010 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Tgt Ion: 43 Resp: 319
Ion Ratio Lower Upper
43 100
58 58.0 42.0 82.0
57 20.8 1.2 41.2

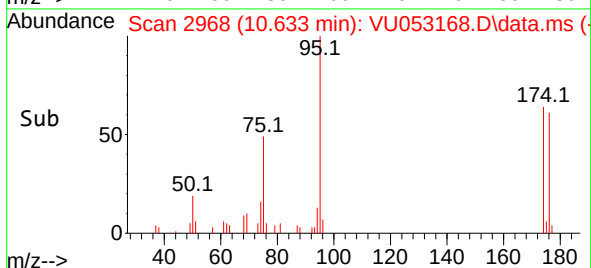
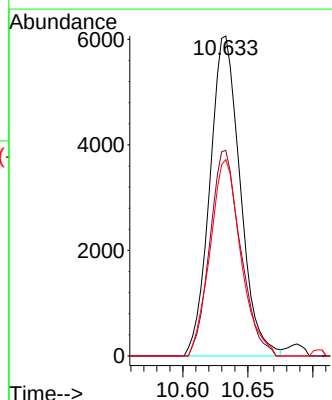
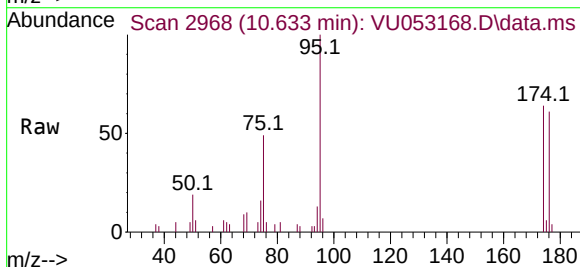
Manual Integrations
APPROVED

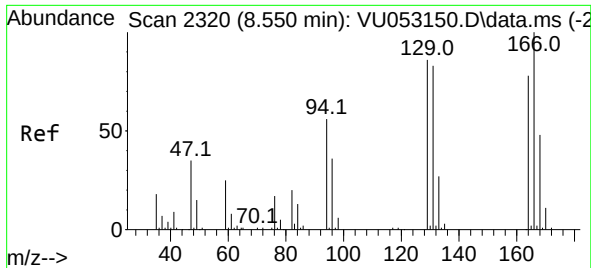
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#57
4-Bromofluorobenzene
Concen: 0.950 ug/l
RT: 10.633 min Scan# 2968
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

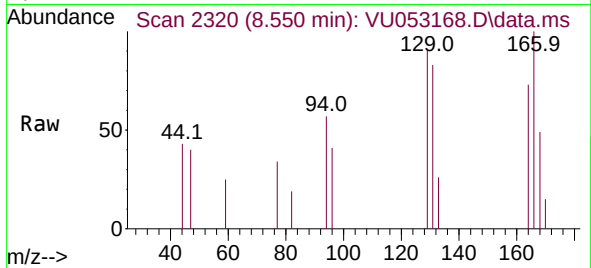
Tgt Ion: 95 Resp: 9847
Ion Ratio Lower Upper
95 100
174 64.6 50.7 76.1
176 62.1 47.8 71.6





#58
Tetrachloroethene
Concen: 0.203 ug/l
RT: 8.550 min Scan# 21
Delta R.T. -0.000 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

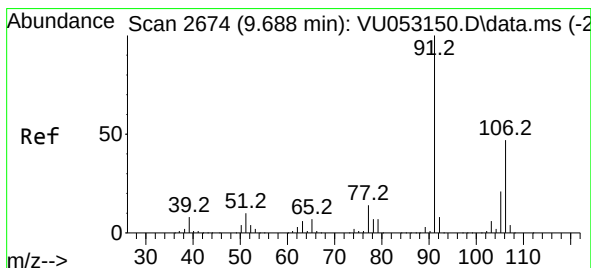
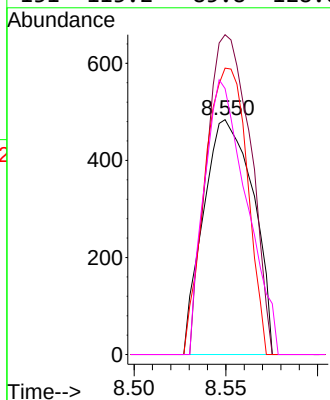
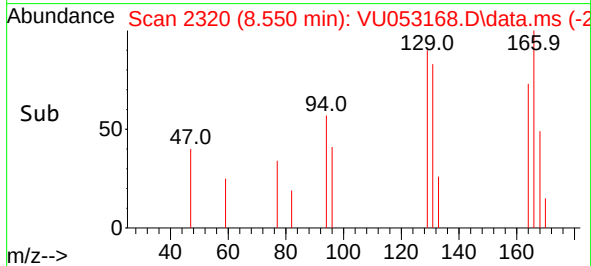
Instrument : MSVOA_U
ClientSampleId : MDL-WATER-03-QT1-2023



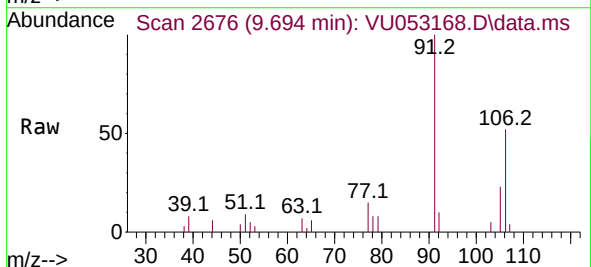
Tgt Ion:164 Resp: 912
Ion Ratio Lower Upper
164 100
166 136.2 103.2 154.8
129 121.9 88.8 133.2
131 113.2 85.8 128.6

Manual Integrations
APPROVED

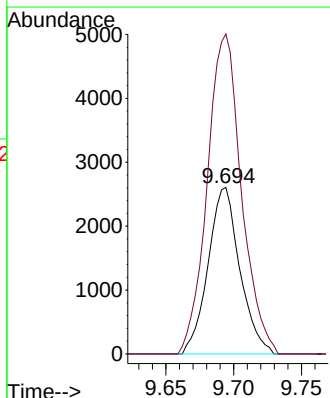
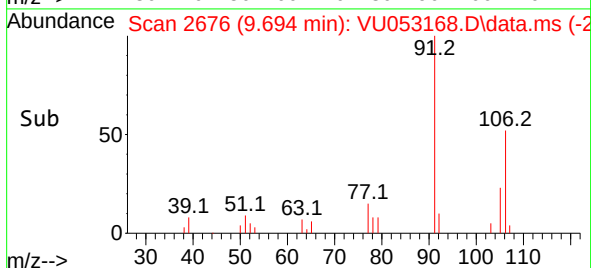
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

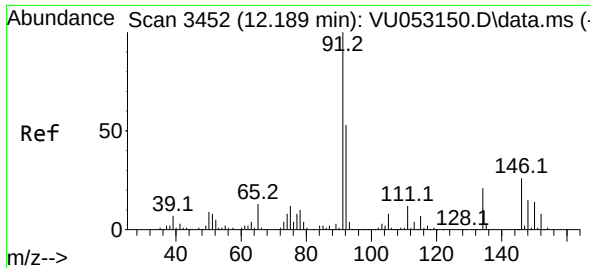


#64
m/p-Xylenes
Concen: 0.374 ug/l
RT: 9.694 min Scan# 2676
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47



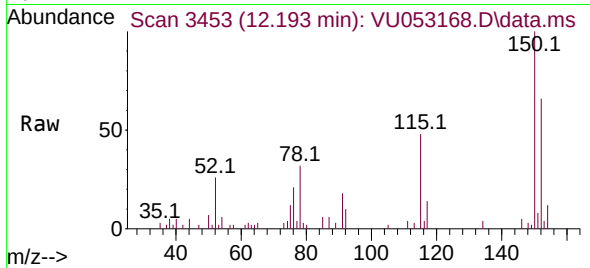
Tgt Ion:106 Resp: 4241
Ion Ratio Lower Upper
106 100
91 207.0 170.7 256.1





#68
1,2-Dichlorobenzene-d4
Concen: 0.929 ug/l
RT: 12.193 min Scan# 3453
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

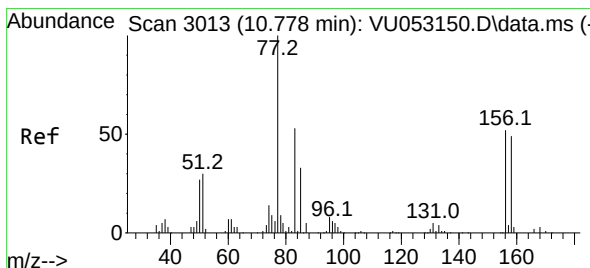
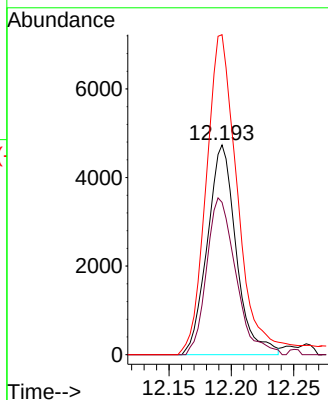
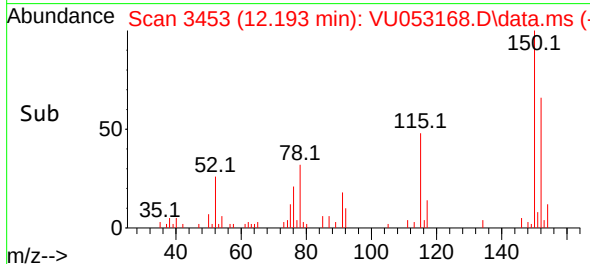
Instrument : MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023



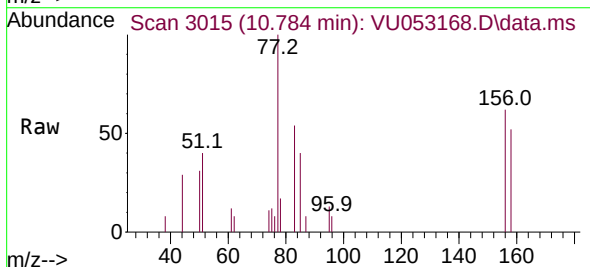
Tgt Ion:152 Resp: 763
Ion Ratio Lower Upper
152 100
115 75.6 0.0 267.8
150 169.7 0.0 623.0

Manual Integrations
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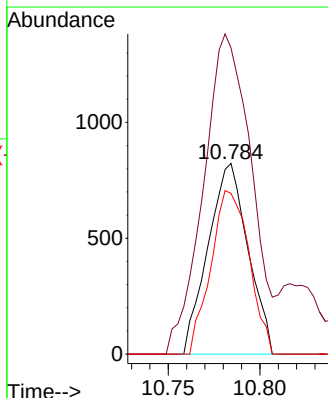
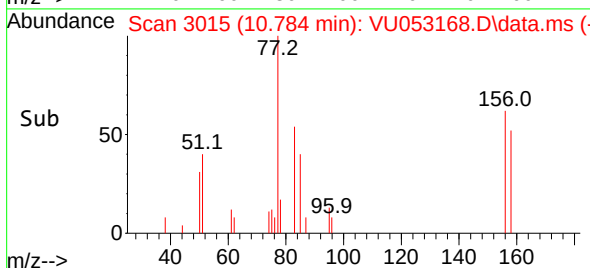
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023

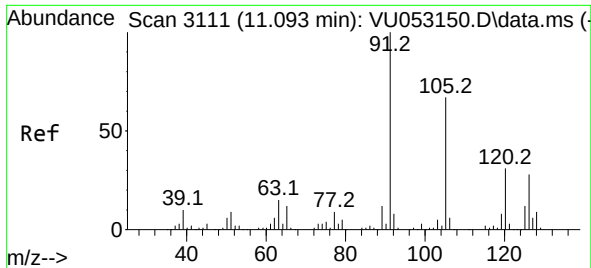


#72
Bromobenzene
Concen: 0.207 ug/l
RT: 10.784 min Scan# 3015
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47



Tgt Ion:156 Resp: 1245
Ion Ratio Lower Upper
156 100
77 200.2 0.0 397.0
158 82.2 0.0 189.2





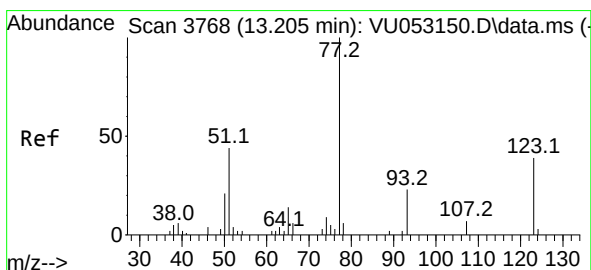
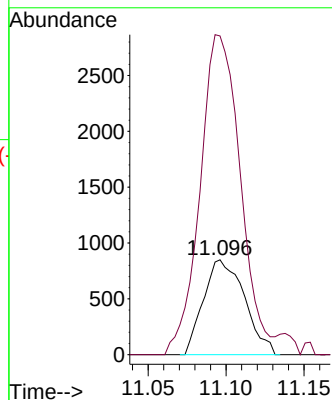
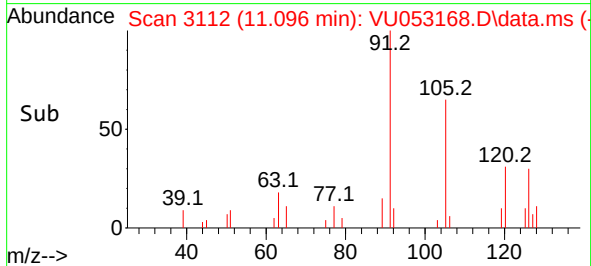
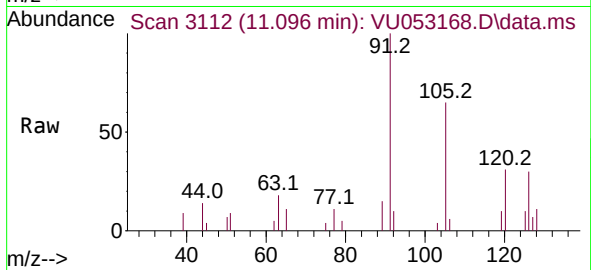
#76
4-Chlorotoluene
Concen: 0.217 ug/l
RT: 11.096 min Scan# 3111
Delta R.T. 0.003 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Tgt Ion:126 Resp: 155
Ion Ratio Lower Upper
126 100
91 330.7 0.0 760.6

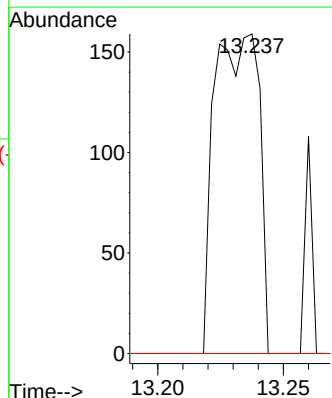
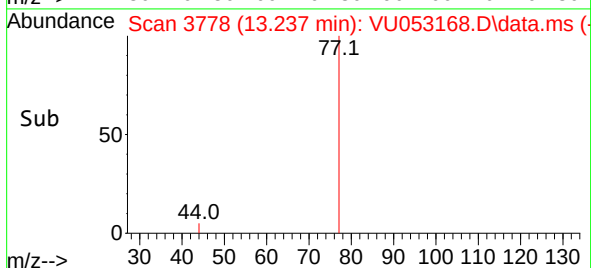
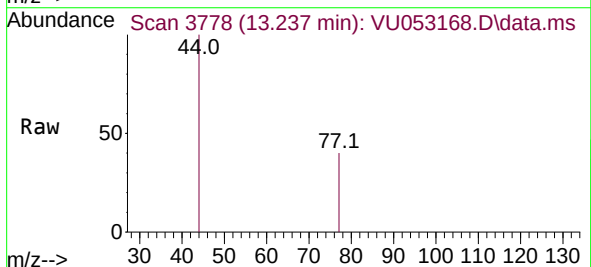
Manual Integrations
APPROVED

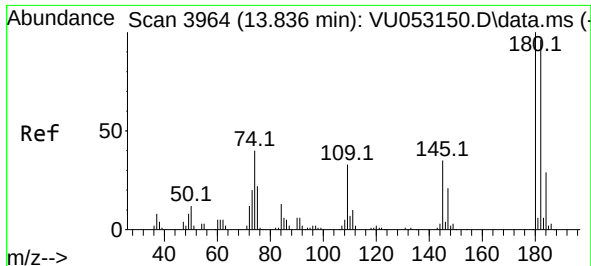
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#80
Nitrobenzene
Concen: 0.601 ug/l m
RT: 13.237 min Scan# 3778
Delta R.T. 0.032 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Tgt Ion: 77 Resp: 196
Ion Ratio Lower Upper
77 100
123 0.0 17.0 60.2#
65 0.0 12.9 16.5#





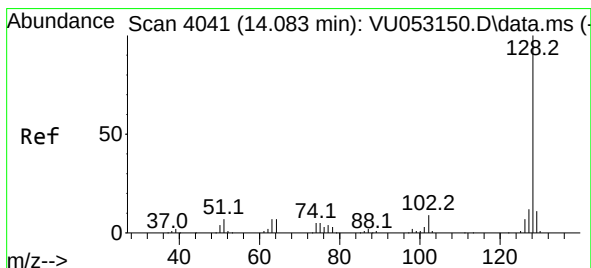
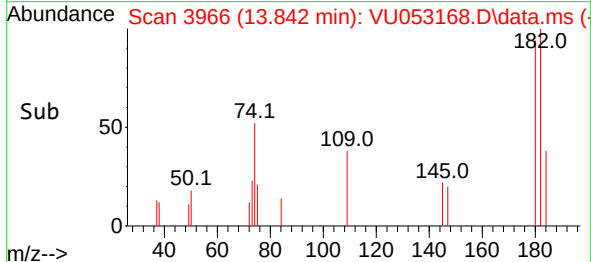
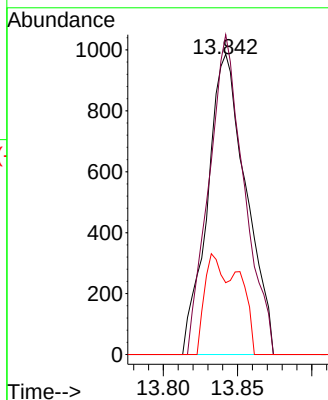
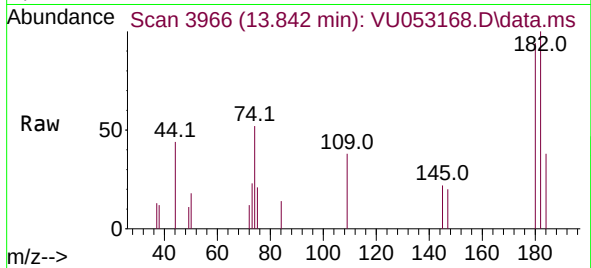
#87
1,2,4-Trichlorobenzene
Concen: 0.231 ug/l
RT: 13.842 min Scan# 3964
Delta R.T. 0.006 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Instrument :
MSVOA_U
ClientSampleId :
MDL-WATER-03-QT1-2023

Tgt Ion:180 Resp: 1784
Ion Ratio Lower Upper
180 100
182 96.7 77.4 116.0
145 16.6 28.3 42.5

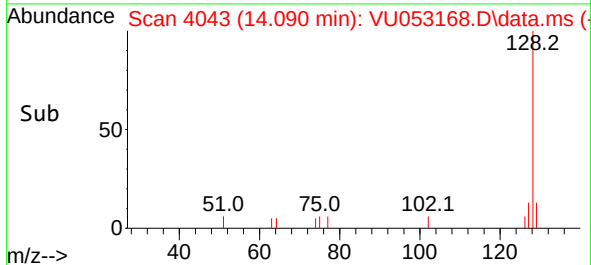
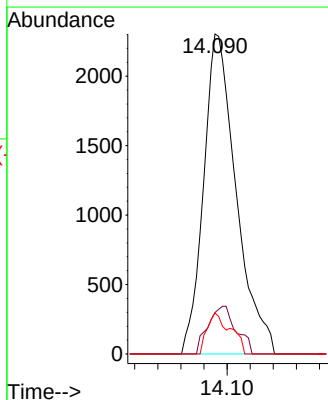
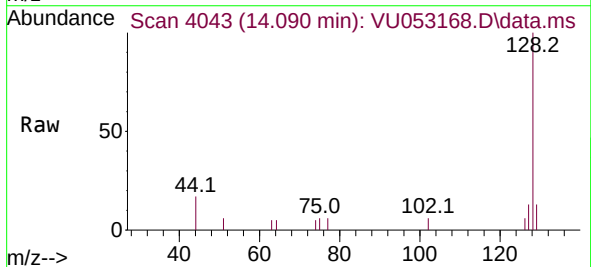
Manual Integrations
APPROVED

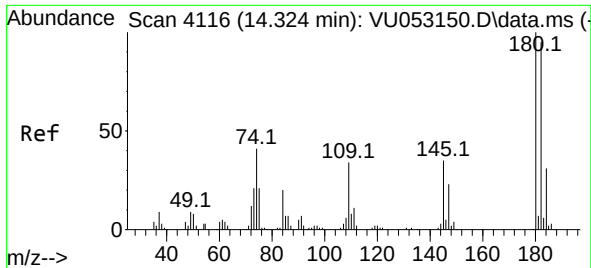
Reviewed By :Krupa Patel 03/01/2023
Supervised By :Mahesh Dadoda 03/01/2023



#89
Naphthalene
Concen: 0.274 ug/l
RT: 14.090 min Scan# 4043
Delta R.T. 0.007 min
Lab File: VU053168.D
Acq: 28 Feb 2023 12:47

Tgt Ion:128 Resp: 4504
Ion Ratio Lower Upper
128 100
127 12.9 9.9 14.9
129 9.1 8.3 12.5





#90

1,2,3-Trichlorobenzene

Concen: 0.256 ug/l

RT: 14.324 min Scan# 4116

Delta R.T. -0.000 min

Lab File: VU053168.D

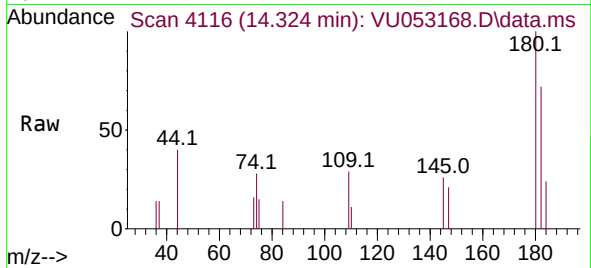
Acq: 28 Feb 2023 12:47

Instrument :

MSVOA_U

ClientSampleId :

MDL-WATER-03-QT1-2023



Tgt Ion:180 Resp: 1744

Ion Ratio Lower Upper

180 100

182 81.7 76.6 115.0

145 25.3 29.0 43.6

Manual Integrations

APPROVED

Reviewed By :Krupa Patel 03/01/2023

Supervised By :Mahesh Dadoda 03/01/2023

