

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU072723\
 Data File : VU054895.D
 Acq On : 27 Jul 2023 15:19
 Operator : MD/SY
 Sample : 03587-08DL 5X
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 PT-UNRVOA-WSDL

Quant Time: Jul 28 05:45:13 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U072523DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Wed Jul 26 09:45:35 2023
 Response via : Initial Calibration

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

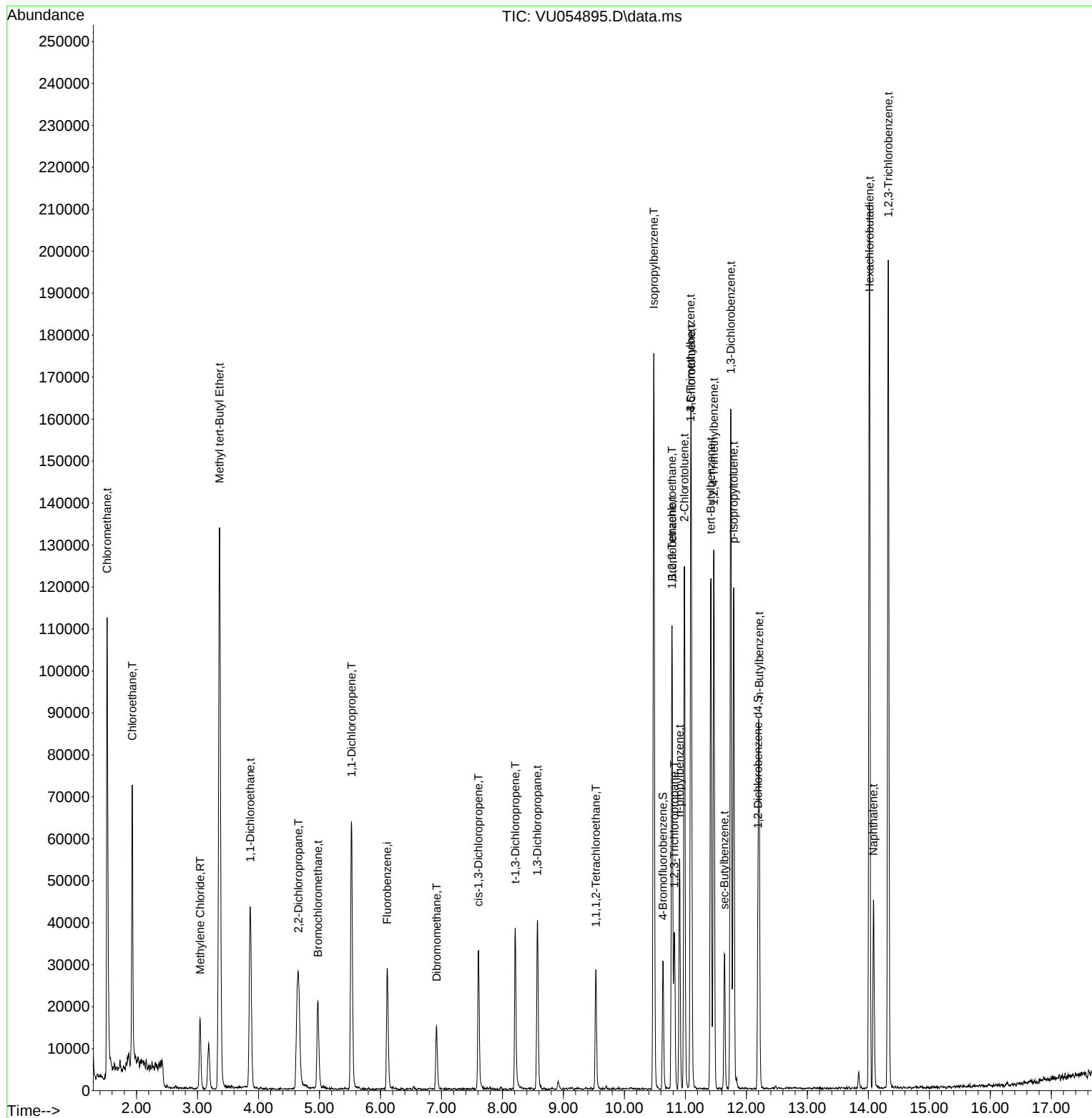
Internal Standards						
1) Fluorobenzene	6.110	96	27745	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.631	95	9156	1.089	ug/l	0.00
Spiked Amount 1.000			Recovery	=	109.000%	
68) 1,2-Dichlorobenzene-d4	12.190	152	10500	1.105	ug/l	0.00
Spiked Amount 1.000			Recovery	=	110.000%	
Target Compounds						
						Qvalue
3) Chloromethane	1.518	50	97411	16.413	ug/l	97
6) Chloroethane	1.930	64	39267	4.793	ug/l	96
15) Methylene Chloride	3.042	84	8620	1.365	ug/l	95
17) 1,1-Dichloroethane	3.865	63	49840	4.273	ug/l	100
21) 2,2-Dichloropropane	4.656	77	12075	1.117	ug/l	# 90
25) Methyl tert-Butyl Ether	3.361	73	160238	10.810	ug/l	97
26) Bromochloromethane	4.975	128	6838	2.406	ug/l	99
29) 1,1-Dichloropropene	5.525	75	35814	4.488	ug/l	96
43) Dibromomethane	6.920	93	5770	1.739	ug/l	97
50) t-1,3-Dichloropropene	8.209	75	21637	2.636	ug/l	98
51) cis-1,3-Dichloropropene	7.605	75	19904	1.973	ug/l	94
53) 1,3-Dichloropropane	8.573	76	24275	2.853	ug/l	95
60) 1,1,1,2-Tetrachloroethane	9.534	131	8043	1.179	ug/l	95
69) Isopropylbenzene	10.483	105	115342	3.449	ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.778	83	8669	1.331	ug/l	# 96
71) 1,2,3-Trichloropropane	10.820	75	14024	3.024	ug/l	# 98
72) Bromobenzene	10.782	156	24611	3.305	ug/l	94
73) n-propylbenzene	10.907	120	9754	1.090	ug/l	99
74) 2-Chlorotoluene	10.984	126	23775	3.069	ug/l	99
75) 1,3,5-Trimethylbenzene	11.087	105	39313	1.452	ug/l	98
76) 4-Chlorotoluene	11.097	126	22060	2.741	ug/l	93
77) tert-Butylbenzene	11.418	119	57881	2.055	ug/l	94
78) 1,2,4-Trimethylbenzene	11.466	105	70122	2.529	ug/l	99
79) sec-Butylbenzene	11.640	105	23443	0.640	ug/l	98
81) p-Isopropyltoluene	11.791	119	66326	2.295	ug/l	98
82) 1,3-Dichlorobenzene	11.746	146	67097	4.233	ug/l	99
84) n-Butylbenzene	12.209	91	41491	1.599	ug/l	99
88) Hexachlorobutadiene	14.019	225	34060	6.589	ug/l	99
89) Naphthalene	14.084	128	34319	2.287	ug/l	99
90) 1,2,3-Trichlorobenzene	14.328	180	58364	6.787	ug/l	99

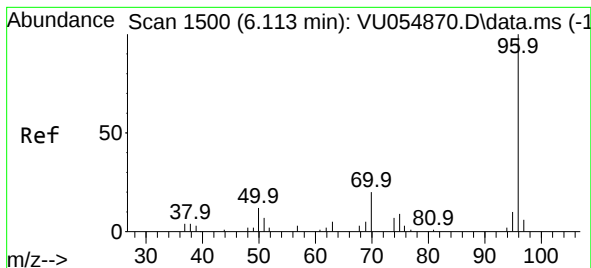
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Wed Jul 26 09:45:35 2023
Response via : Initial Calibration





#1

Fluorobenzene

Concen: 1.000 ug/l

RT: 6.110 min Scan# 14

Delta R.T. -0.003 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

PT-UNRVOA-WSDL

Tgt Ion: 96 Resp: 27745

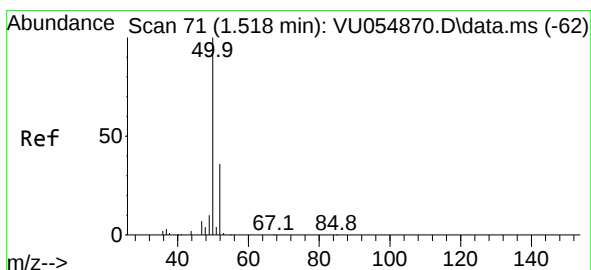
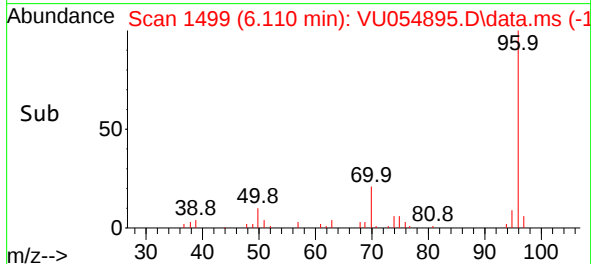
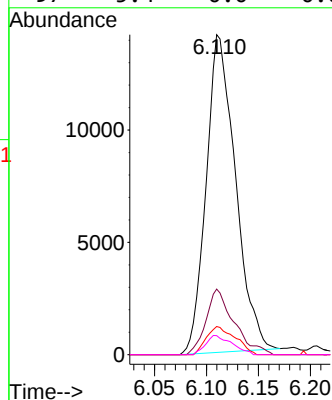
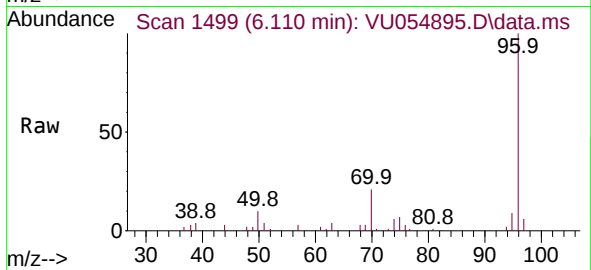
Ion Ratio Lower Upper

96 100

70 19.7 14.0 21.0

95 8.7 8.7 13.1#

97 5.4 0.0 0.0#



#3

Chloromethane

Concen: 16.413 ug/l

RT: 1.518 min Scan# 71

Delta R.T. 0.000 min

Lab File: VU054895.D

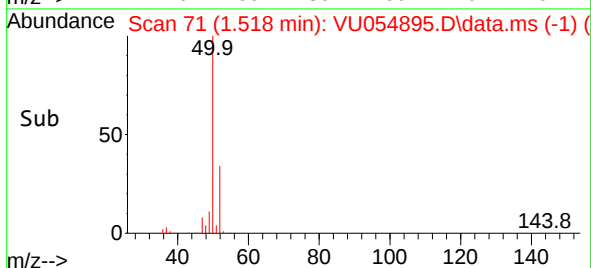
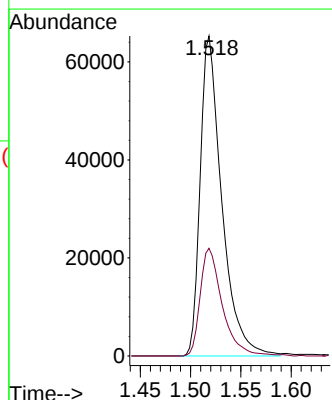
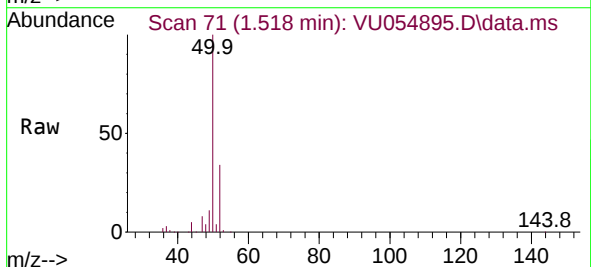
Acq: 27 Jul 2023 15:19

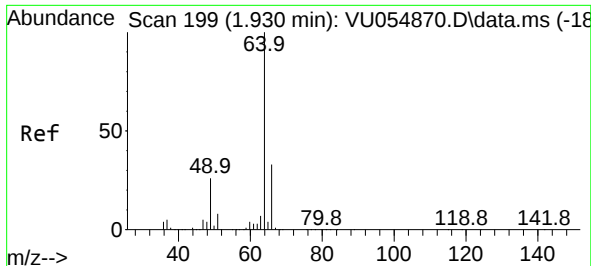
Tgt Ion: 50 Resp: 97411

Ion Ratio Lower Upper

50 100

52 33.7 28.2 42.2

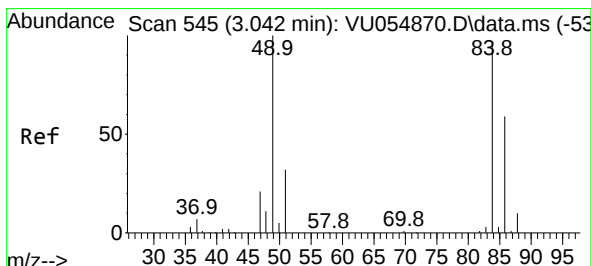
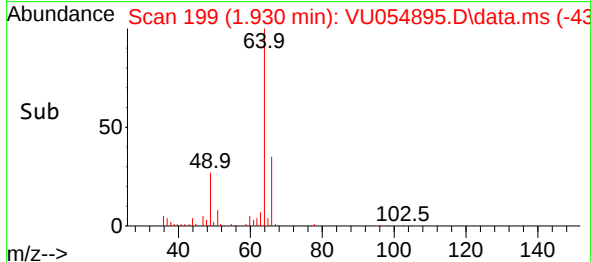
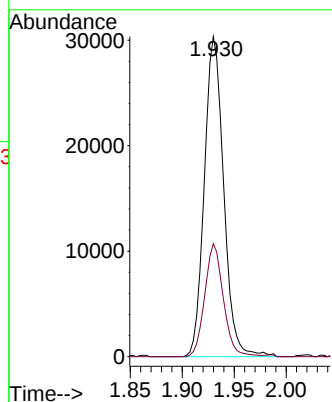
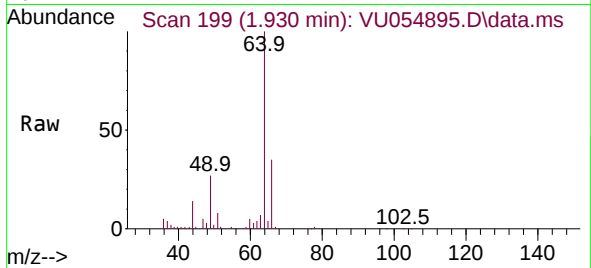




#6
Chloroethane
Concen: 4.793 ug/l
RT: 1.930 min Scan# 199
Delta R.T. 0.000 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

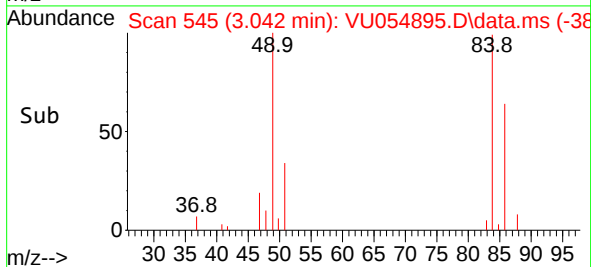
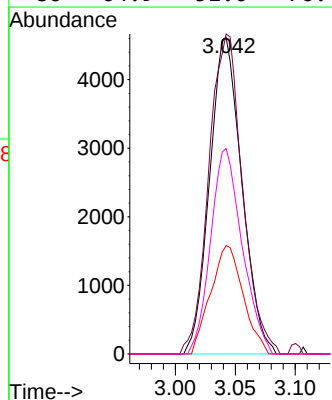
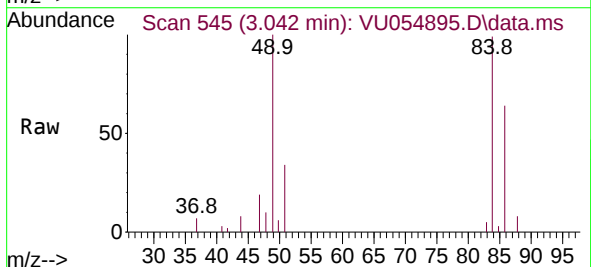
Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

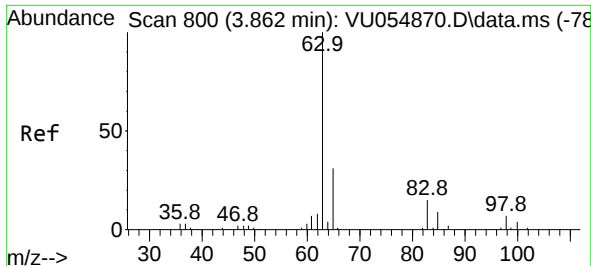
Tgt Ion: 64 Resp: 39267
Ion Ratio Lower Upper
64 100
66 35.3 26.2 39.4



#15
Methylene Chloride
Concen: 1.365 ug/l
RT: 3.042 min Scan# 545
Delta R.T. 0.000 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion: 84 Resp: 8620
Ion Ratio Lower Upper
84 100
49 101.1 87.8 131.6
51 34.2 0.0 68.2
86 64.9 51.0 76.4

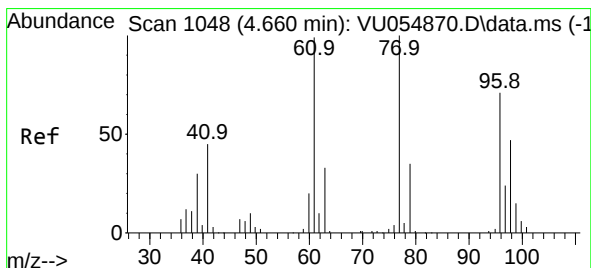
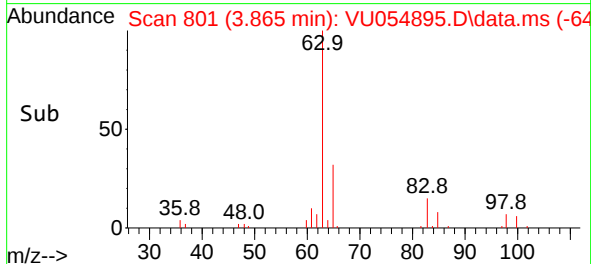
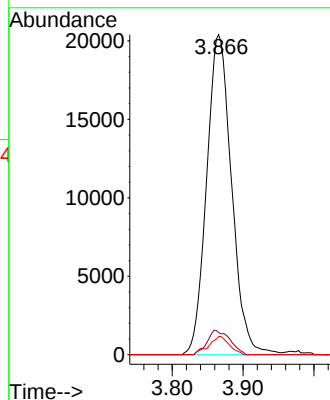
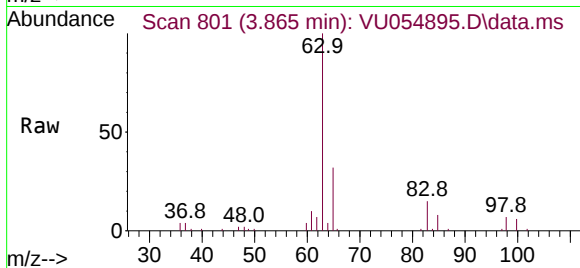




#17
 1,1-Dichloroethane
 Concen: 4.273 ug/l
 RT: 3.865 min Scan# 801
 Delta R.T. 0.003 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

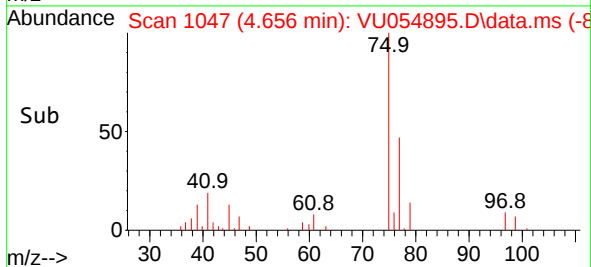
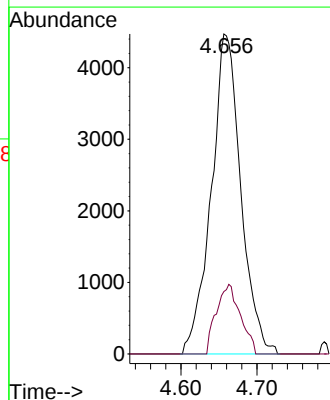
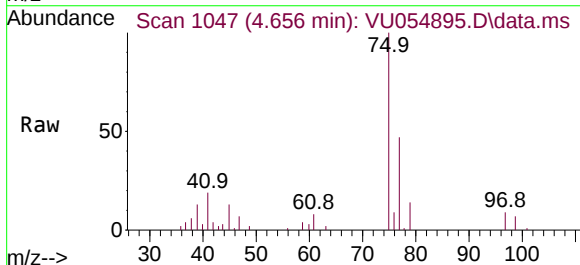
Instrument :
 MSVOA_U
 ClientSampleId :
 PT-UNRVOA-WSDL

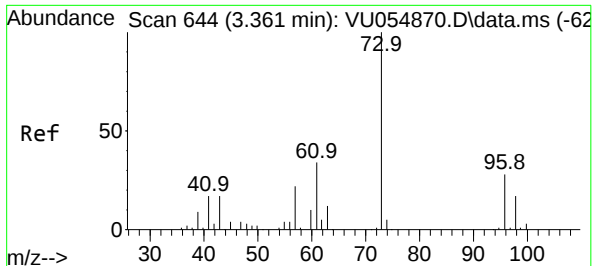
Tgt Ion: 63 Resp: 49840
 Ion Ratio Lower Upper
 63 100
 98 6.9 3.6 10.8
 100 5.6 2.8 8.4



#21
 2,2-Dichloropropane
 Concen: 1.117 ug/l
 RT: 4.656 min Scan# 1047
 Delta R.T. -0.003 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

Tgt Ion: 77 Resp: 12075
 Ion Ratio Lower Upper
 77 100
 97 17.6 18.0 27.0#

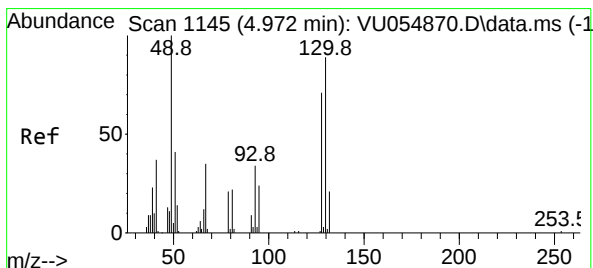
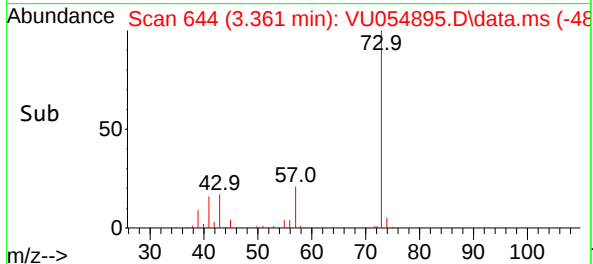
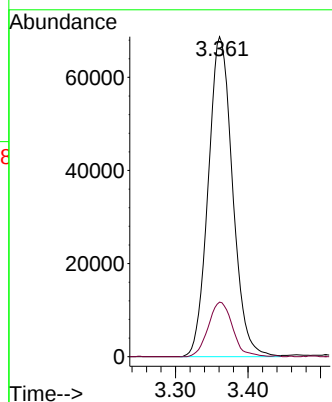
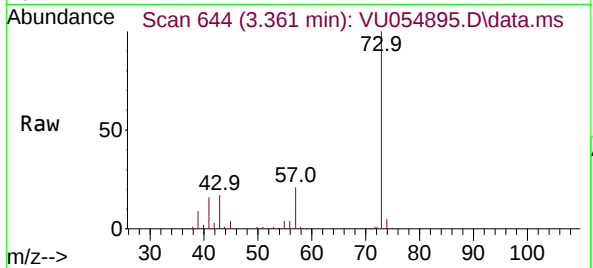




#25
Methyl tert-Butyl Ether
Concen: 10.810 ug/l
RT: 3.361 min Scan# 644
Delta R.T. 0.000 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

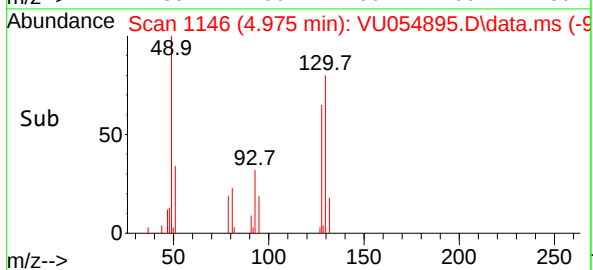
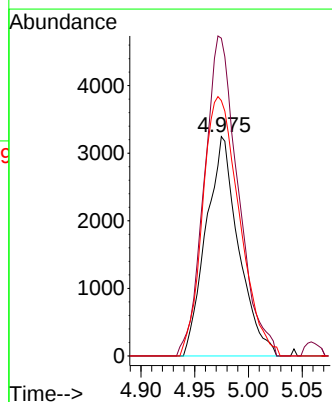
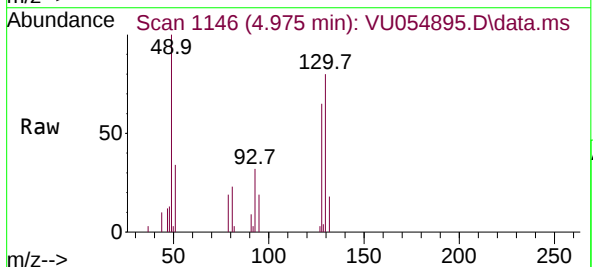
Instrument :
MSVOA_U
ClientSampleId :
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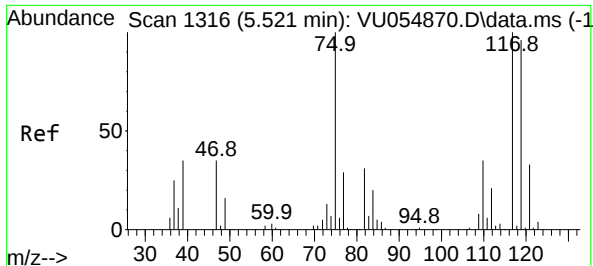
Tgt Ion: 73 Resp: 160238
Ion Ratio Lower Upper
73 100
43 17.1 14.6 22.0



#26
Bromochloromethane
Concen: 2.406 ug/l
RT: 4.975 min Scan# 1146
Delta R.T. 0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion: 128 Resp: 6838
Ion Ratio Lower Upper
128 100
49 151.5 0.0 304.0
130 133.5 104.3 156.5





#29

1,1-Dichloropropene

Concen: 4.488 ug/l

RT: 5.525 min Scan# 11

Delta R.T. 0.003 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

PT-UNRVOA-WSDL

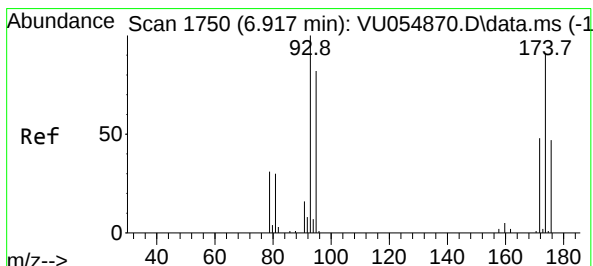
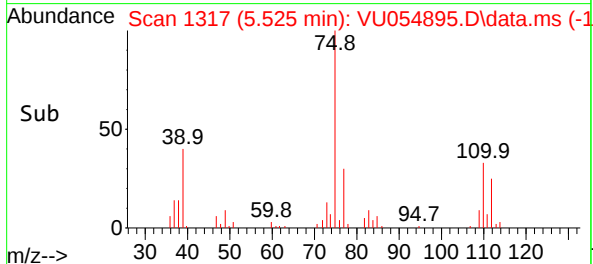
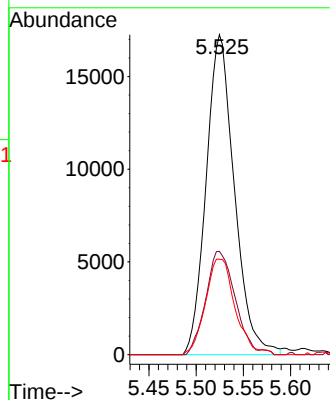
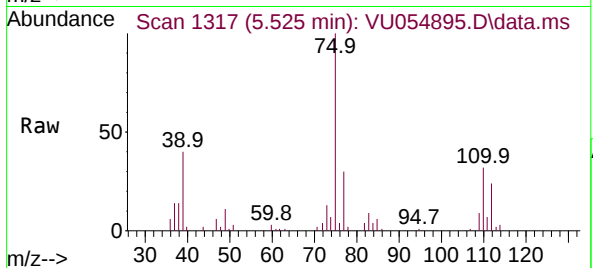
Tgt Ion: 75 Resp: 35814

Ion Ratio Lower Upper

75 100

110 33.4 18.5 55.5

77 31.3 24.9 37.3



#43

Dibromomethane

Concen: 1.739 ug/l

RT: 6.920 min Scan# 1751

Delta R.T. 0.003 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

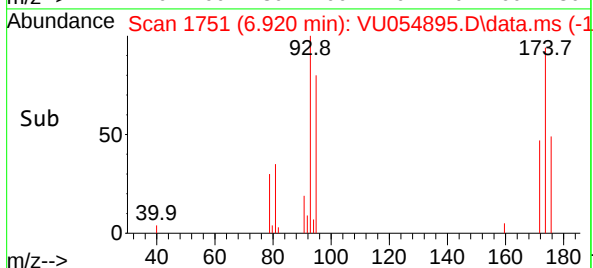
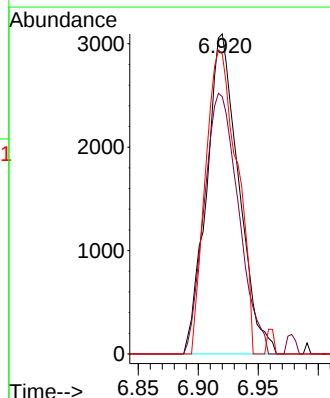
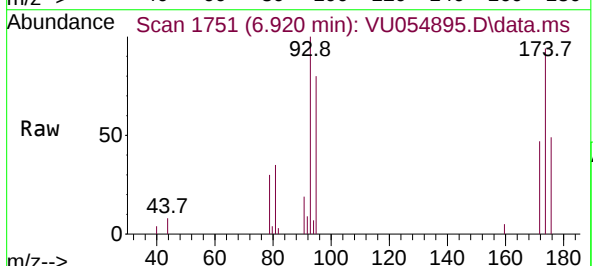
Tgt Ion: 93 Resp: 5770

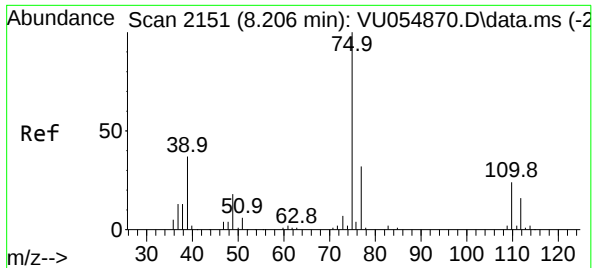
Ion Ratio Lower Upper

93 100

95 87.0 64.7 97.1

174 93.6 74.4 111.6

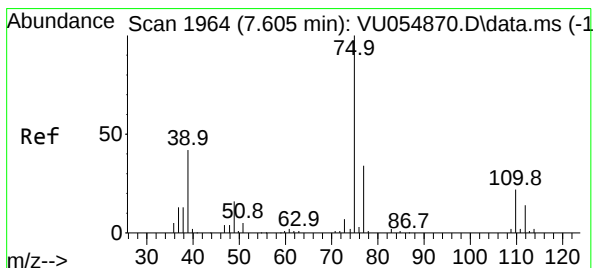
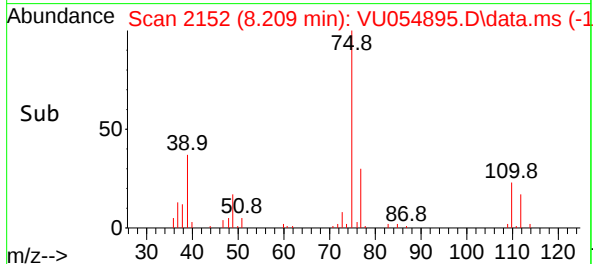
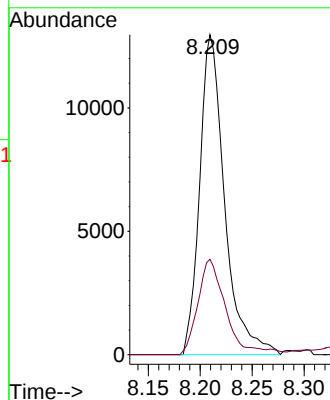
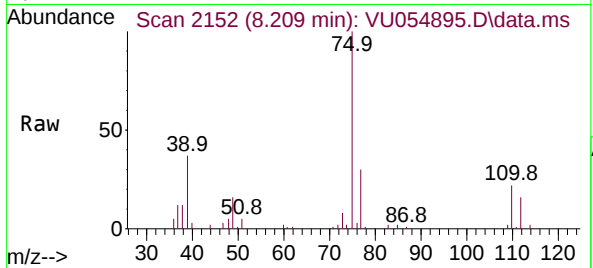




#50
 t-1,3-Dichloropropene
 Concen: 2.636 ug/l
 RT: 8.209 min Scan# 2151
 Delta R.T. 0.003 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

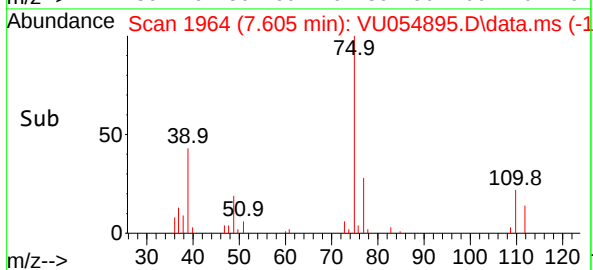
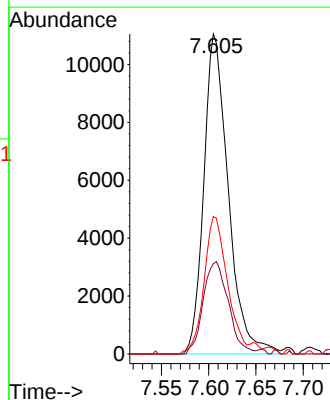
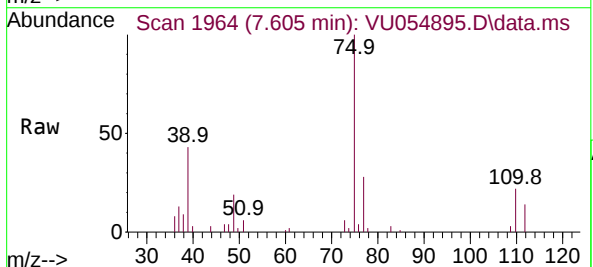
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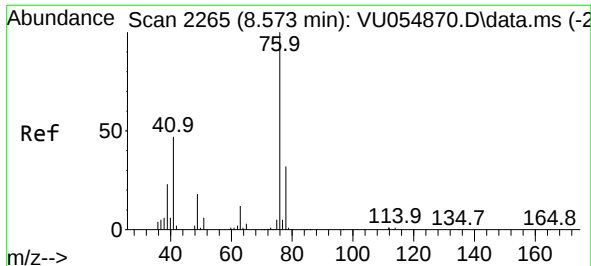
Tgt Ion: 75 Resp: 21637
 Ion Ratio Lower Upper
 75 100
 77 29.8 24.9 37.3



#51
 cis-1,3-Dichloropropene
 Concen: 1.973 ug/l
 RT: 7.605 min Scan# 1964
 Delta R.T. 0.000 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

Tgt Ion: 75 Resp: 19904
 Ion Ratio Lower Upper
 75 100
 77 28.2 25.8 38.8
 39 42.9 31.7 47.5





#53

1,3-Dichloropropane

Concen: 2.853 ug/l

RT: 8.573 min Scan# 21

Delta R.T. 0.000 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

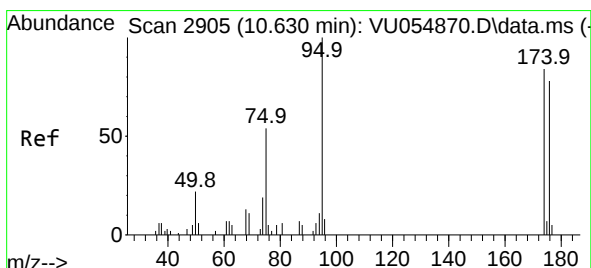
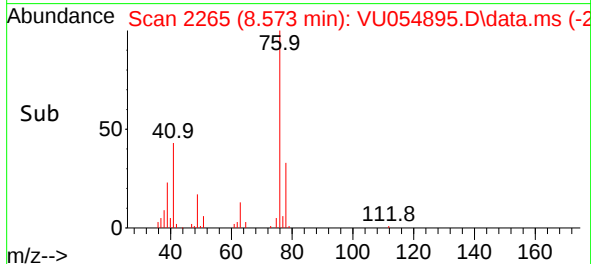
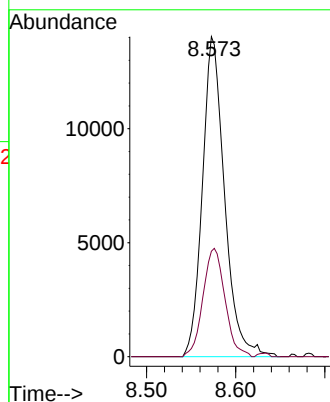
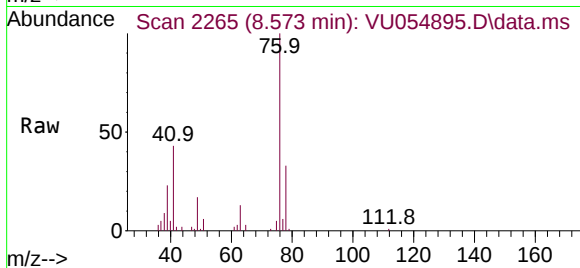
PT-UNRVOA-WSDL

Tgt Ion: 76 Resp: 24275

Ion Ratio Lower Upper

76 100

78 33.5 24.6 36.8



#57

4-Bromofluorobenzene

Concen: 1.089 ug/l

RT: 10.631 min Scan# 2905

Delta R.T. 0.000 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

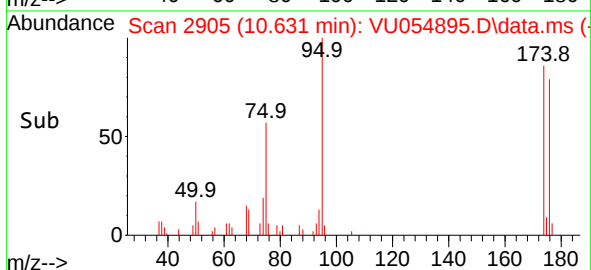
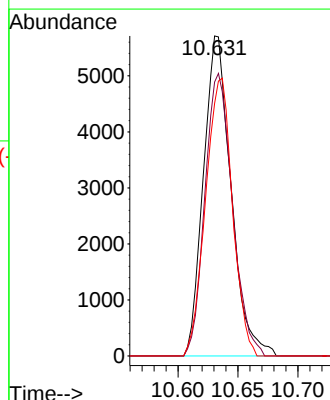
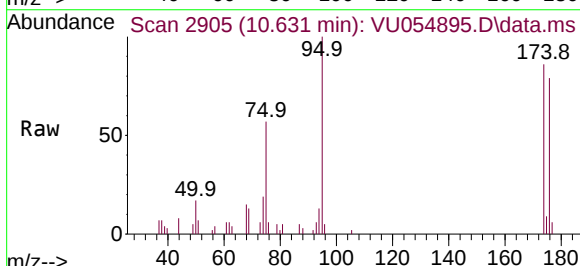
Tgt Ion: 95 Resp: 9156

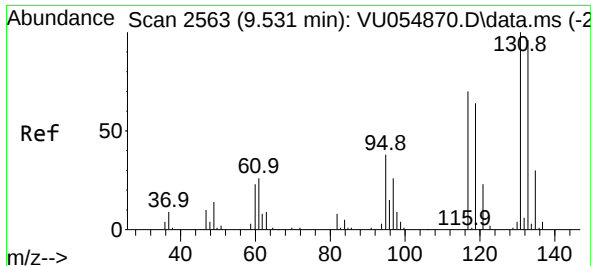
Ion Ratio Lower Upper

95 100

174 87.8 79.3 118.9

176 84.4 71.5 107.3





#60

1,1,1,2-Tetrachloroethane

Concen: 1.179 ug/l

RT: 9.534 min Scan# 2563

Delta R.T. 0.003 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

PT-UNRVOA-WSDL

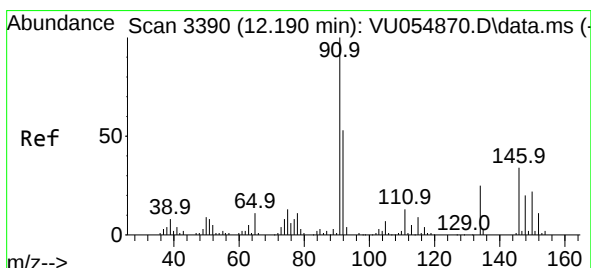
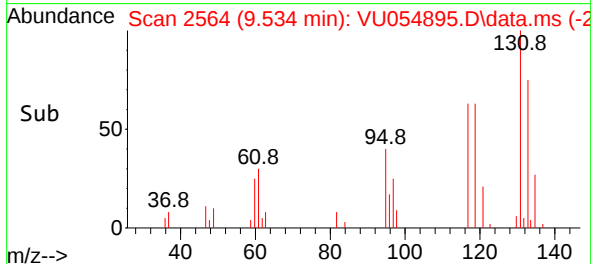
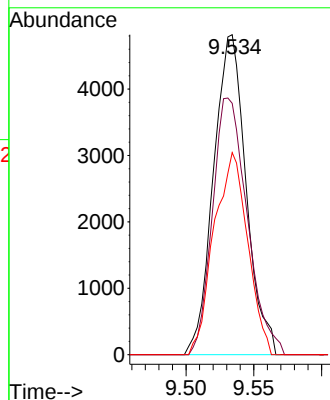
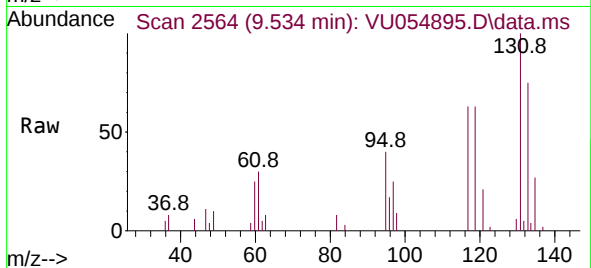
Tgt Ion:131 Resp: 8043

Ion Ratio Lower Upper

131 100

133 85.4 74.2 111.4

119 65.2 51.0 76.4



#68

1,2-Dichlorobenzene-d4

Concen: 1.105 ug/l

RT: 12.190 min Scan# 3390

Delta R.T. 0.000 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

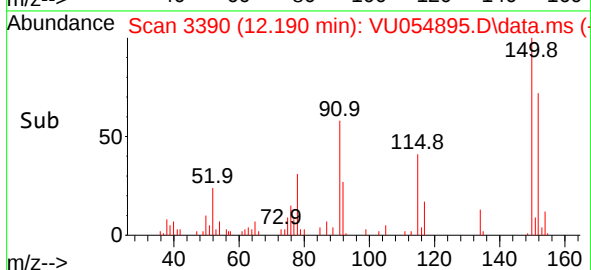
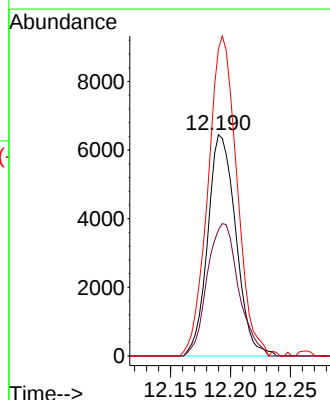
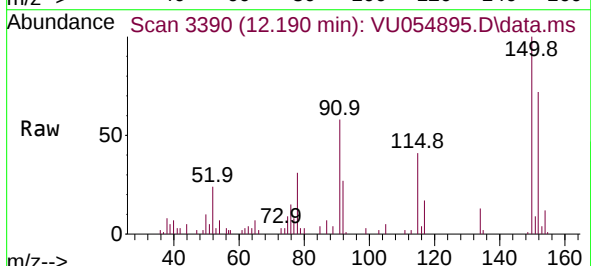
Tgt Ion:152 Resp: 10500

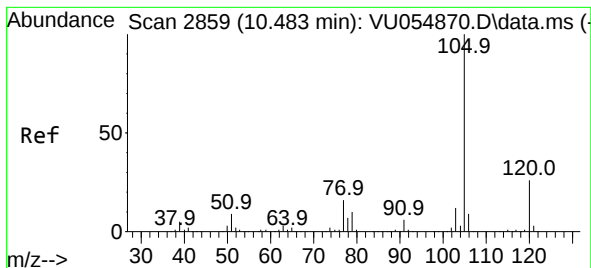
Ion Ratio Lower Upper

152 100

115 66.8 0.0 234.8

150 149.1 0.0 598.2





#69

Isopropylbenzene

Concen: 3.449 ug/l

RT: 10.483 min Scan# 2859

Delta R.T. 0.000 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

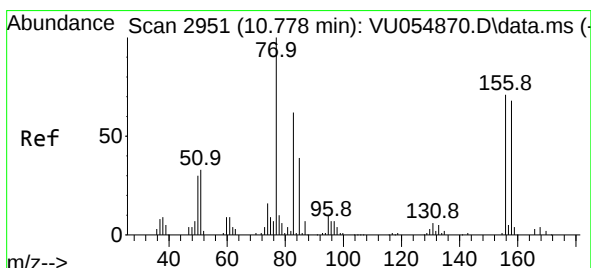
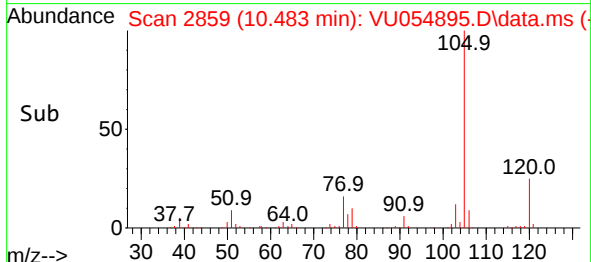
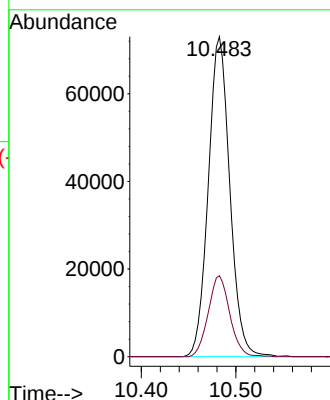
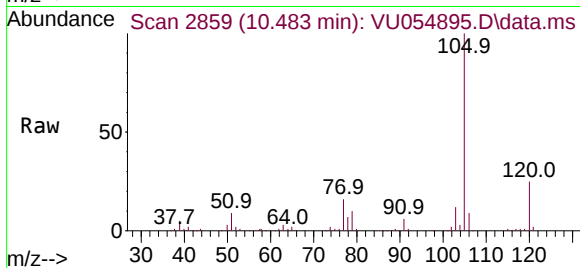
PT-UNRVOA-WSDL

Tgt Ion:105 Resp: 115342

Ion Ratio Lower Upper

105 100

120 25.4 12.6 37.6



#70

1,1,2,2-Tetrachloroethane

Concen: 1.331 ug/l

RT: 10.778 min Scan# 2951

Delta R.T. 0.000 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

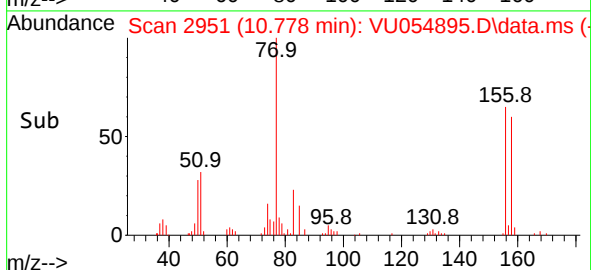
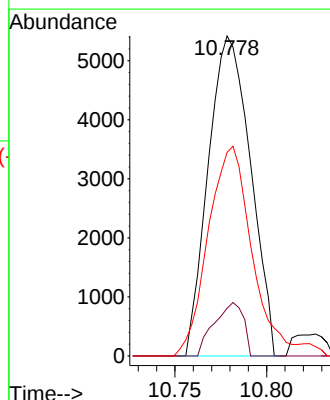
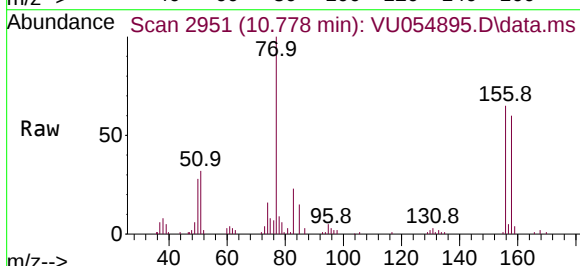
Tgt Ion: 83 Resp: 8669

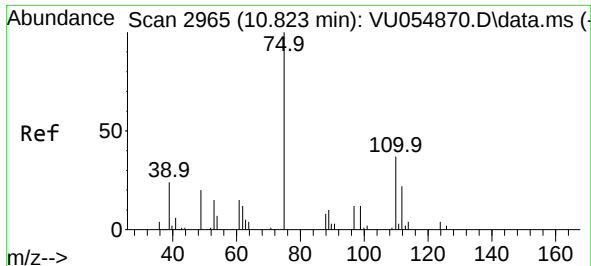
Ion Ratio Lower Upper

83 100

131 11.5 7.5 11.3#

85 69.2 53.0 79.6



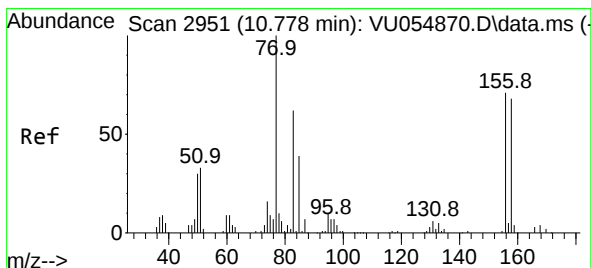
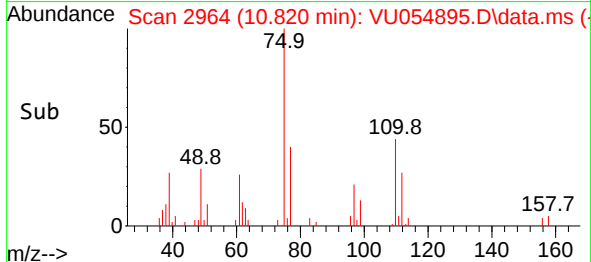
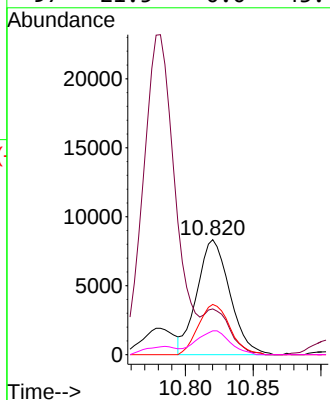
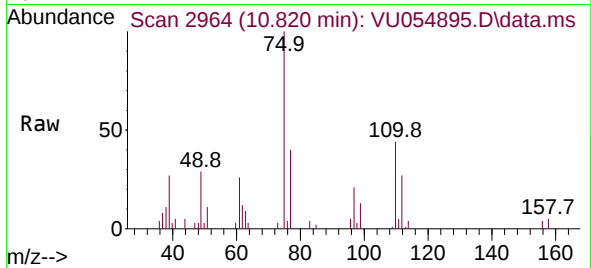


#71
1,2,3-Trichloropropane
Concen: 3.024 ug/l
RT: 10.820 min Scan# 2965
Delta R.T. -0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

Tgt Ion: 75 Resp: 14024

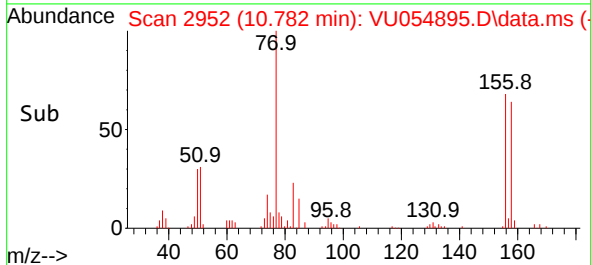
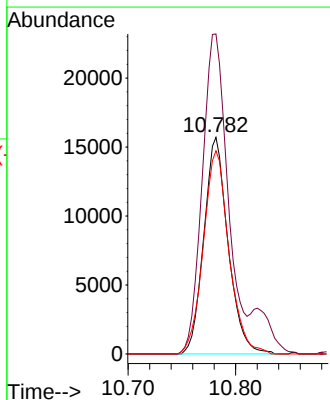
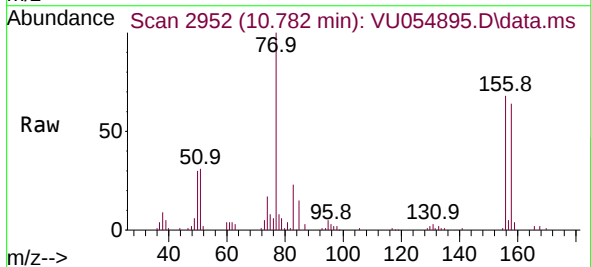
Ion	Ratio	Lower	Upper
75	100		
77	0.0	0.0	0.0
110	42.0	0.0	80.8
97	21.5	0.0	43.4

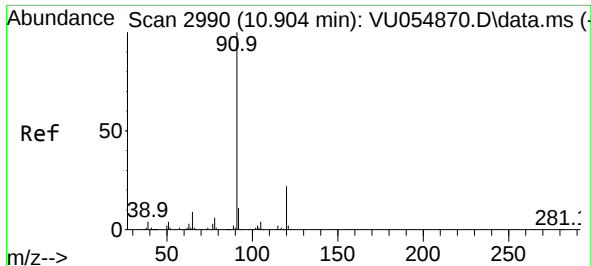


#72
Bromobenzene
Concen: 3.305 ug/l
RT: 10.782 min Scan# 2952
Delta R.T. 0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion: 156 Resp: 24611

Ion	Ratio	Lower	Upper
156	100		
77	154.9	0.0	293.2
158	99.1	0.0	189.8

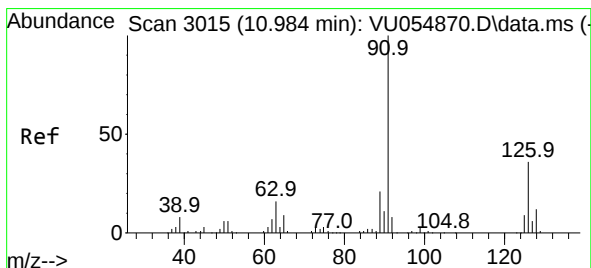
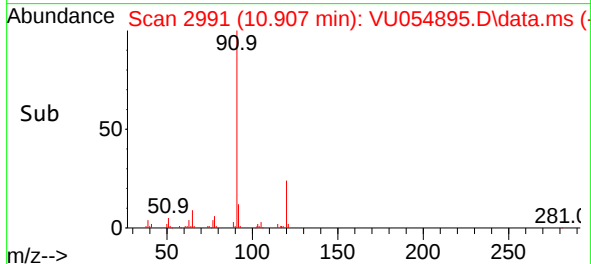
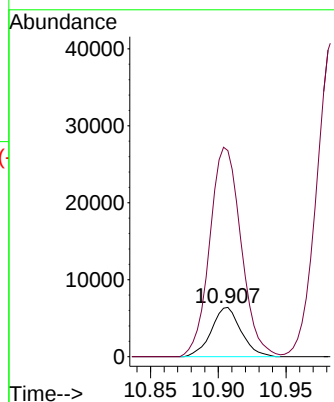
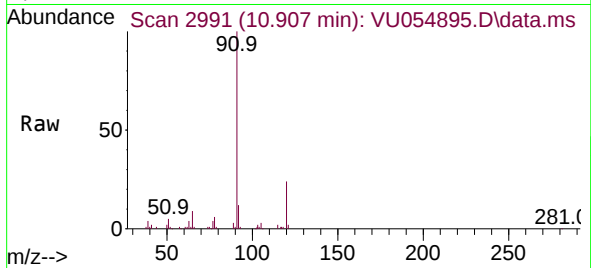




#73
n-propylbenzene
Concen: 1.090 ug/l
RT: 10.907 min Scan# 2991
Delta R.T. 0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

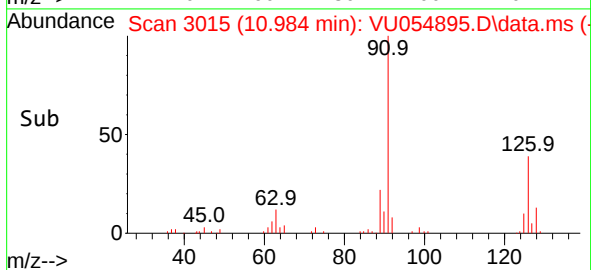
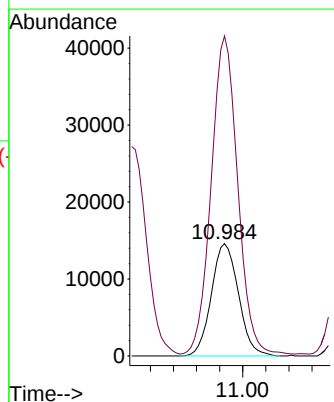
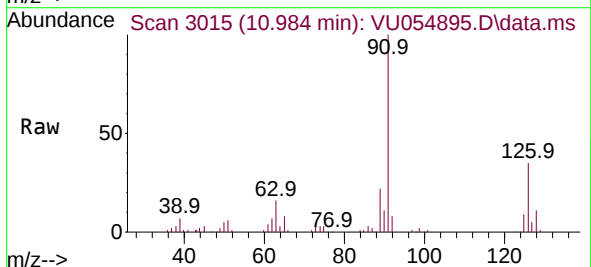
Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

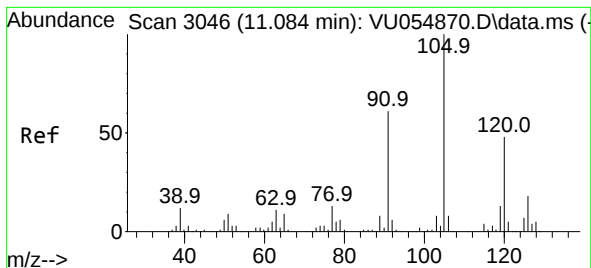
Tgt Ion:120 Resp: 9754
Ion Ratio Lower Upper
120 100
91 449.9 361.8 542.6



#74
2-Chlorotoluene
Concen: 3.069 ug/l
RT: 10.984 min Scan# 3015
Delta R.T. 0.000 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion:126 Resp: 23775
Ion Ratio Lower Upper
126 100
91 279.3 0.0 561.4





#75

1,3,5-Trimethylbenzene

Concen: 1.452 ug/l

RT: 11.087 min Scan# 3046

Delta R.T. 0.003 min

Lab File: VU054895.D

Acq: 27 Jul 2023 15:19

Instrument :

MSVOA_U

ClientSampleId :

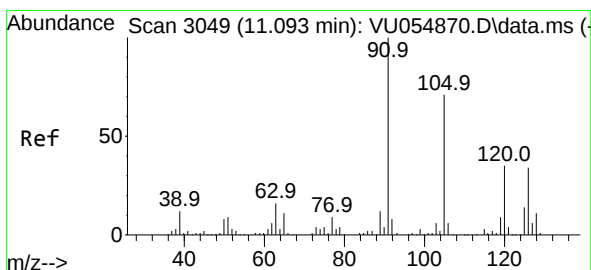
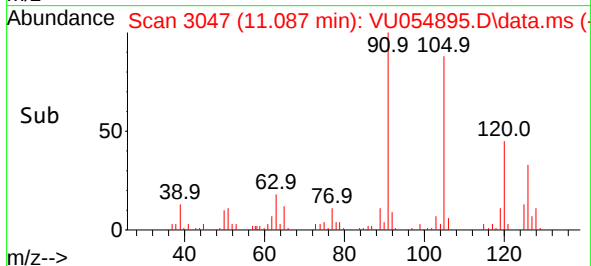
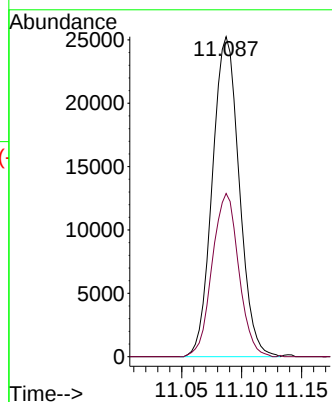
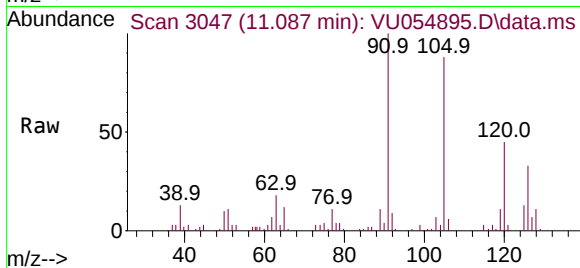
PT-UNRVOA-WSDL

Tgt Ion:105 Resp: 39313

Ion Ratio Lower Upper

105 100

120 50.4 39.0 58.4



#76

4-Chlorotoluene

Concen: 2.741 ug/l

RT: 11.097 min Scan# 3050

Delta R.T. 0.003 min

Lab File: VU054895.D

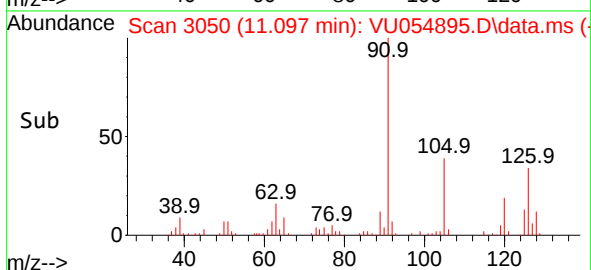
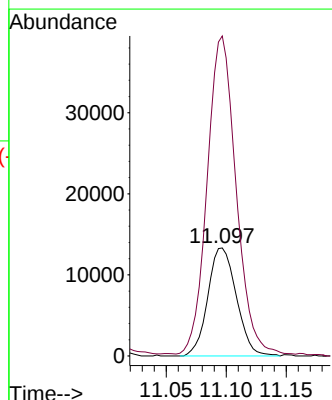
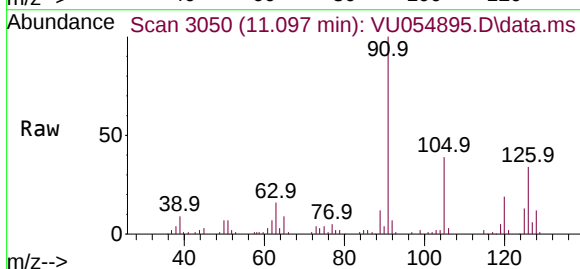
Acq: 27 Jul 2023 15:19

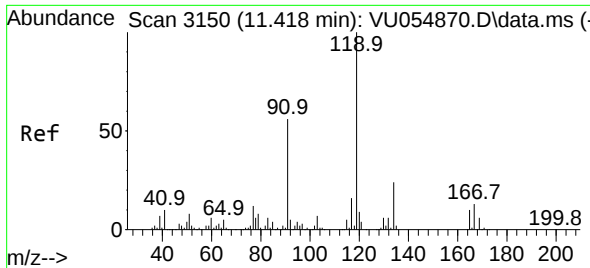
Tgt Ion:126 Resp: 22060

Ion Ratio Lower Upper

126 100

91 298.0 0.0 623.4

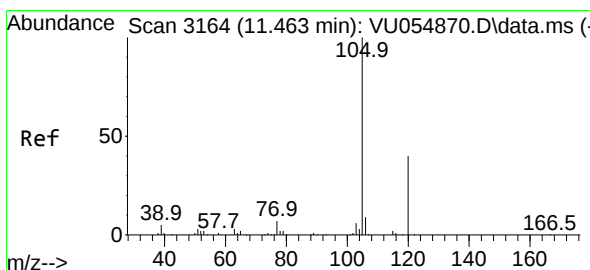
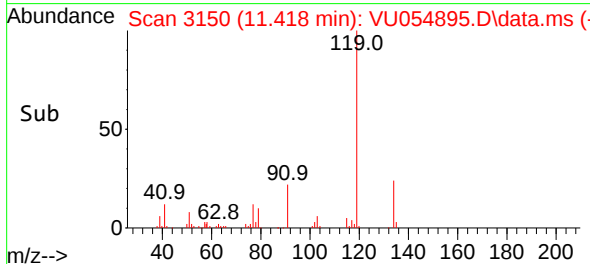
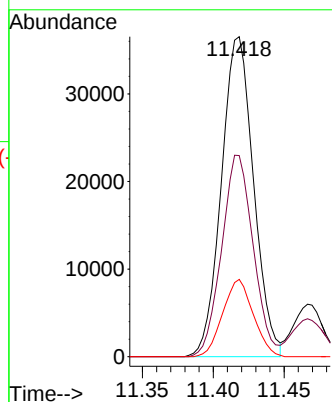
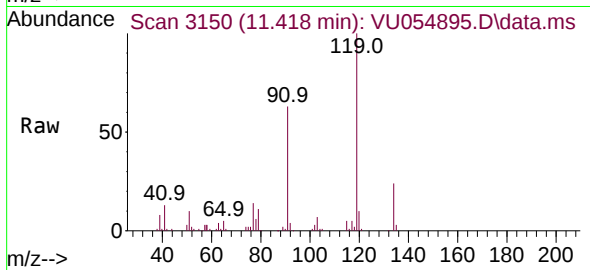




#77
 tert-Butylbenzene
 Concen: 2.055 ug/l
 RT: 11.418 min Scan# 3150
 Delta R.T. 0.000 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

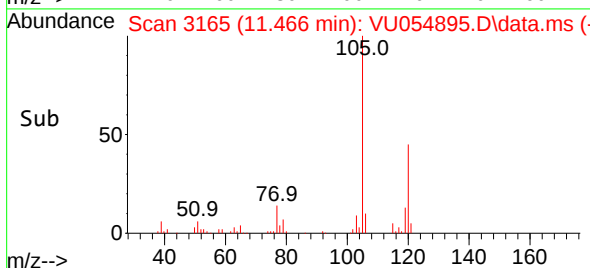
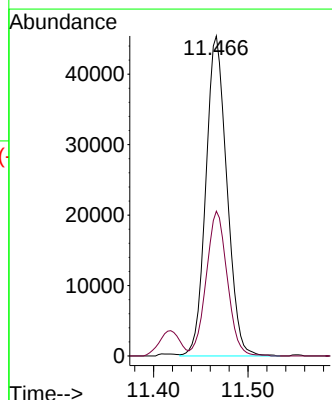
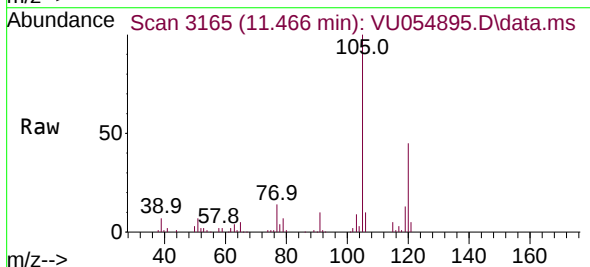
Instrument :
 MSVOA_U
 ClientSampleId :
 PT-UNRVOA-WSDL

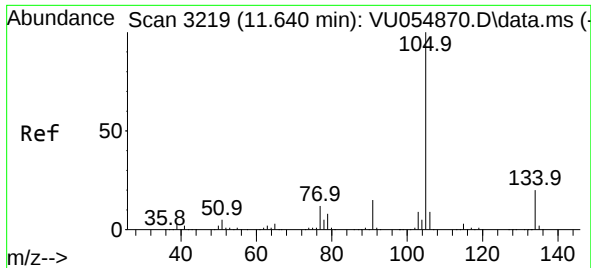
Tgt Ion:	119	Resp:	57881
Ion	Ratio	Lower	Upper
119	100		
91	61.9	27.7	83.1
134	22.9	18.6	27.8



#78
 1,2,4-Trimethylbenzene
 Concen: 2.529 ug/l
 RT: 11.466 min Scan# 3165
 Delta R.T. 0.003 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

Tgt Ion:	105	Resp:	70122
Ion	Ratio	Lower	Upper
105	100		
120	45.3	22.4	67.3

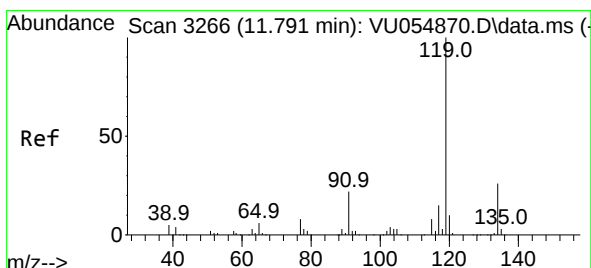
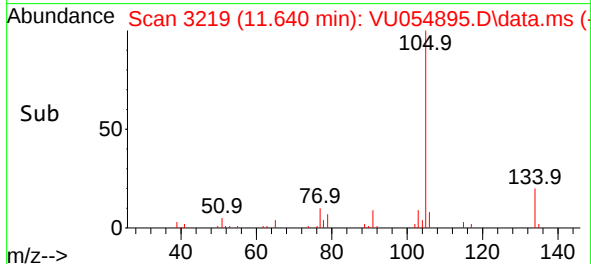
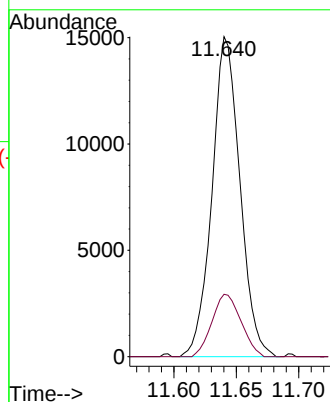
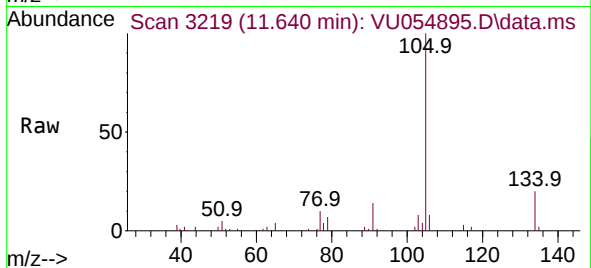




#79
 sec-Butylbenzene
 Concen: 0.640 ug/l
 RT: 11.640 min Scan# 3219
 Delta R.T. 0.000 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

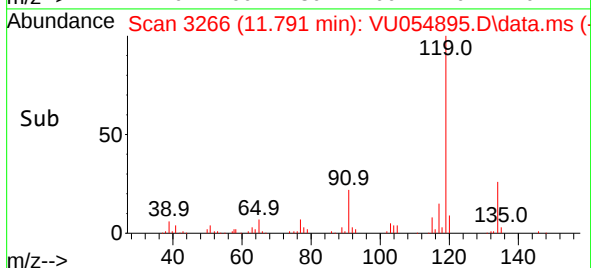
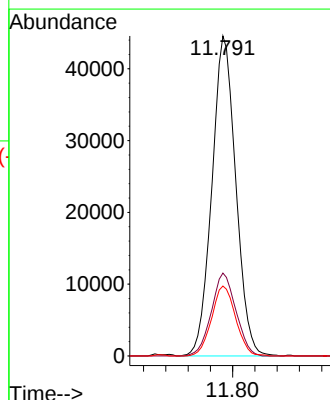
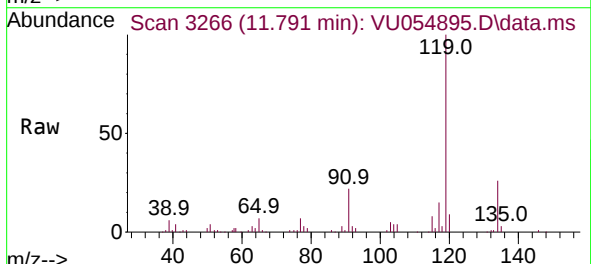
Instrument :
 MSVOA_U
 ClientSampleId :
 PT-UNRVOA-WSDL

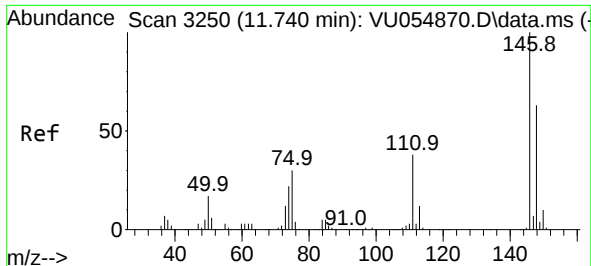
Tgt Ion:105 Resp: 23443
 Ion Ratio Lower Upper
 105 100
 134 20.3 15.7 23.5



#81
 p-Isopropyltoluene
 Concen: 2.295 ug/l
 RT: 11.791 min Scan# 3266
 Delta R.T. 0.000 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

Tgt Ion:119 Resp: 66326
 Ion Ratio Lower Upper
 119 100
 134 26.6 20.6 31.0
 91 22.0 18.2 27.4

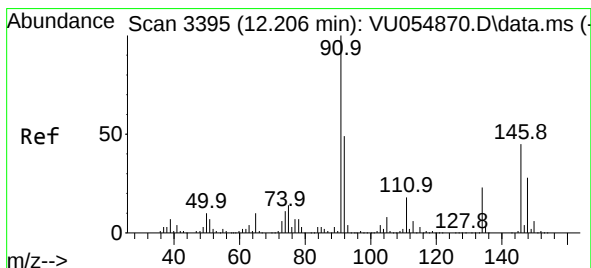
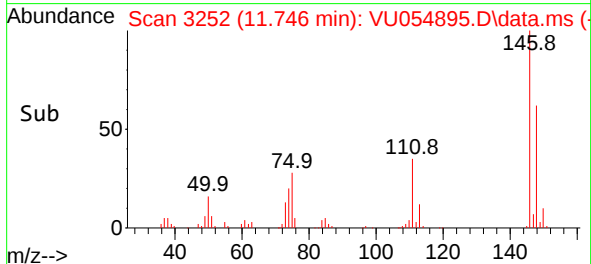
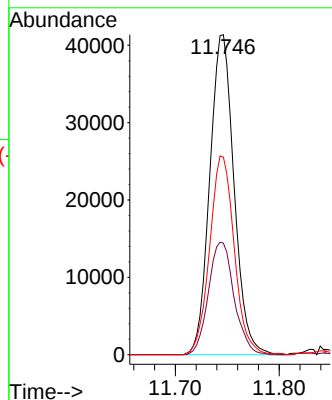
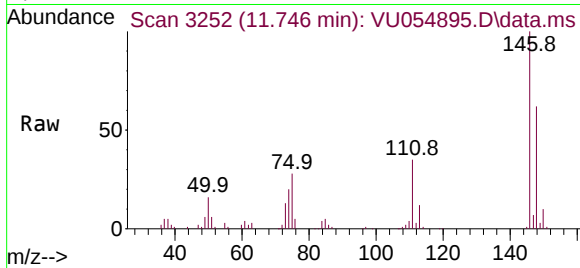




#82
1,3-Dichlorobenzene
Concen: 4.233 ug/l
RT: 11.746 min Scan# 31
Delta R.T. 0.006 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

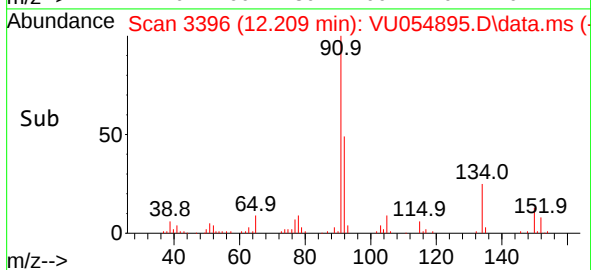
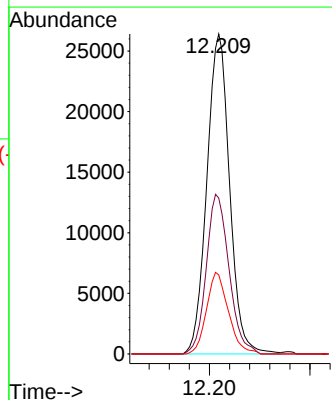
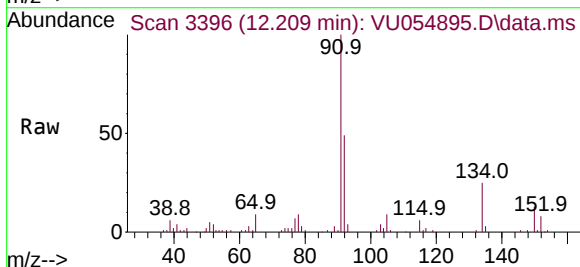
Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

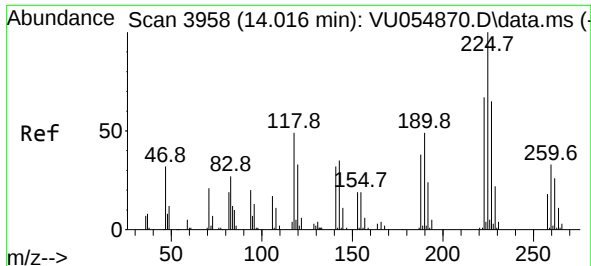
Tgt Ion:146 Resp: 67097
Ion Ratio Lower Upper
146 100
111 37.1 30.5 45.7
148 63.0 51.0 76.6



#84
n-Butylbenzene
Concen: 1.599 ug/l
RT: 12.209 min Scan# 3396
Delta R.T. 0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion: 91 Resp: 41491
Ion Ratio Lower Upper
91 100
92 50.0 39.8 59.8
134 24.5 20.2 30.4

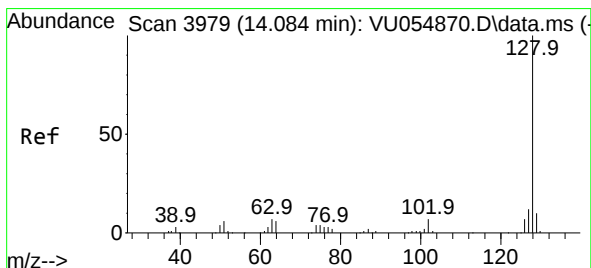
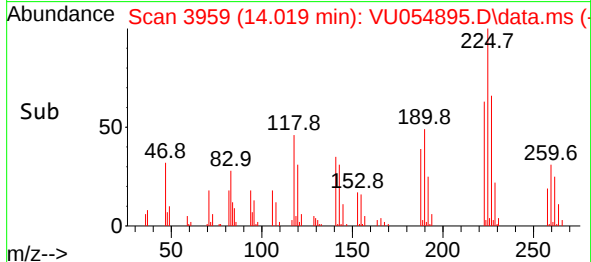
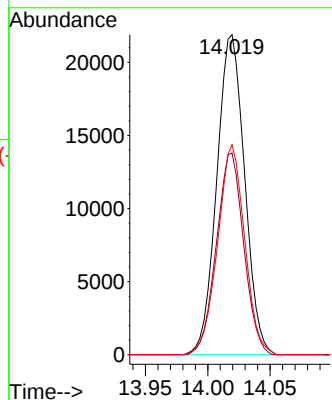
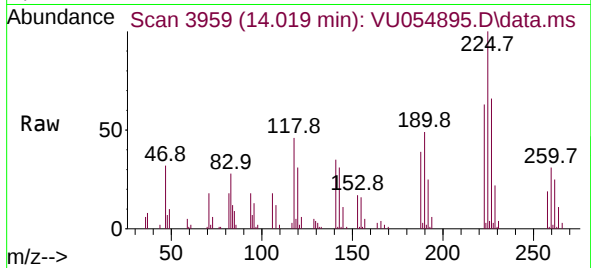




#88
Hexachlorobutadiene
Concen: 6.589 ug/l
RT: 14.019 min Scan# 3958
Delta R.T. 0.003 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

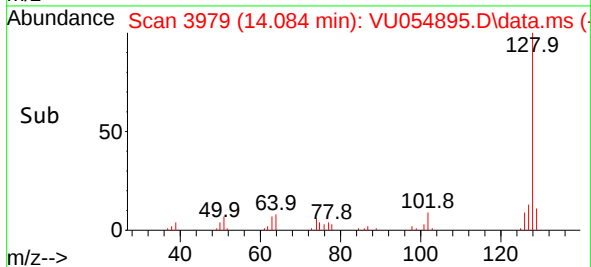
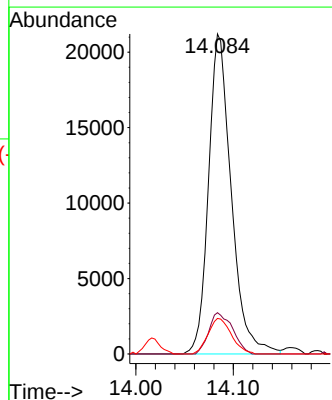
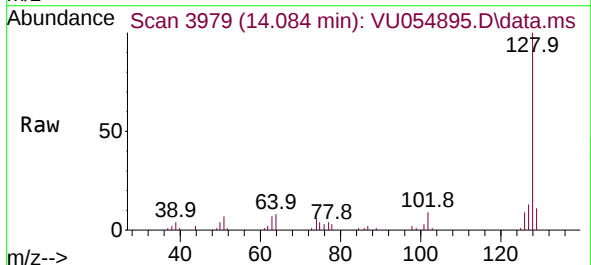
Instrument :
MSVOA_U
ClientSampleId :
PT-UNRVOA-WSDL

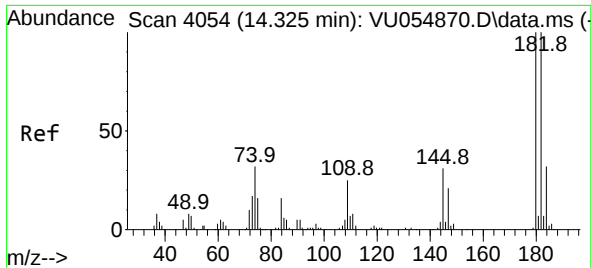
Tgt Ion:225 Resp: 34060
Ion Ratio Lower Upper
225 100
223 62.0 50.6 76.0
227 63.6 50.7 76.1



#89
Naphthalene
Concen: 2.287 ug/l
RT: 14.084 min Scan# 3979
Delta R.T. 0.000 min
Lab File: VU054895.D
Acq: 27 Jul 2023 15:19

Tgt Ion:128 Resp: 34319
Ion Ratio Lower Upper
128 100
127 13.5 10.6 15.8
129 11.4 8.7 13.1





#90
 1,2,3-Trichlorobenzene
 Concen: 6.787 ug/l
 RT: 14.328 min Scan# 4054
 Delta R.T. 0.003 min
 Lab File: VU054895.D
 Acq: 27 Jul 2023 15:19

Instrument :
 MSVOA_U
 ClientSampleId :
 PT-UNRVOA-WSDL

Tgt Ion:180 Resp: 58364
 Ion Ratio Lower Upper
 180 100
 182 96.0 76.0 114.0
 145 30.4 24.3 36.5

