

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU071825\
 Data File : VU063538.D
 Acq On : 18 Jul 2025 15:54
 Operator : MD/SY
 Sample : Q2552-08
 Misc : 25mL/MSVOA_U/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 WS0725-PT-UNRVOA-WS

Quant Time: Jul 18 23:50:59 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U071625DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Thu Jul 17 03:49:40 2025
 Response via : Initial Calibration

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

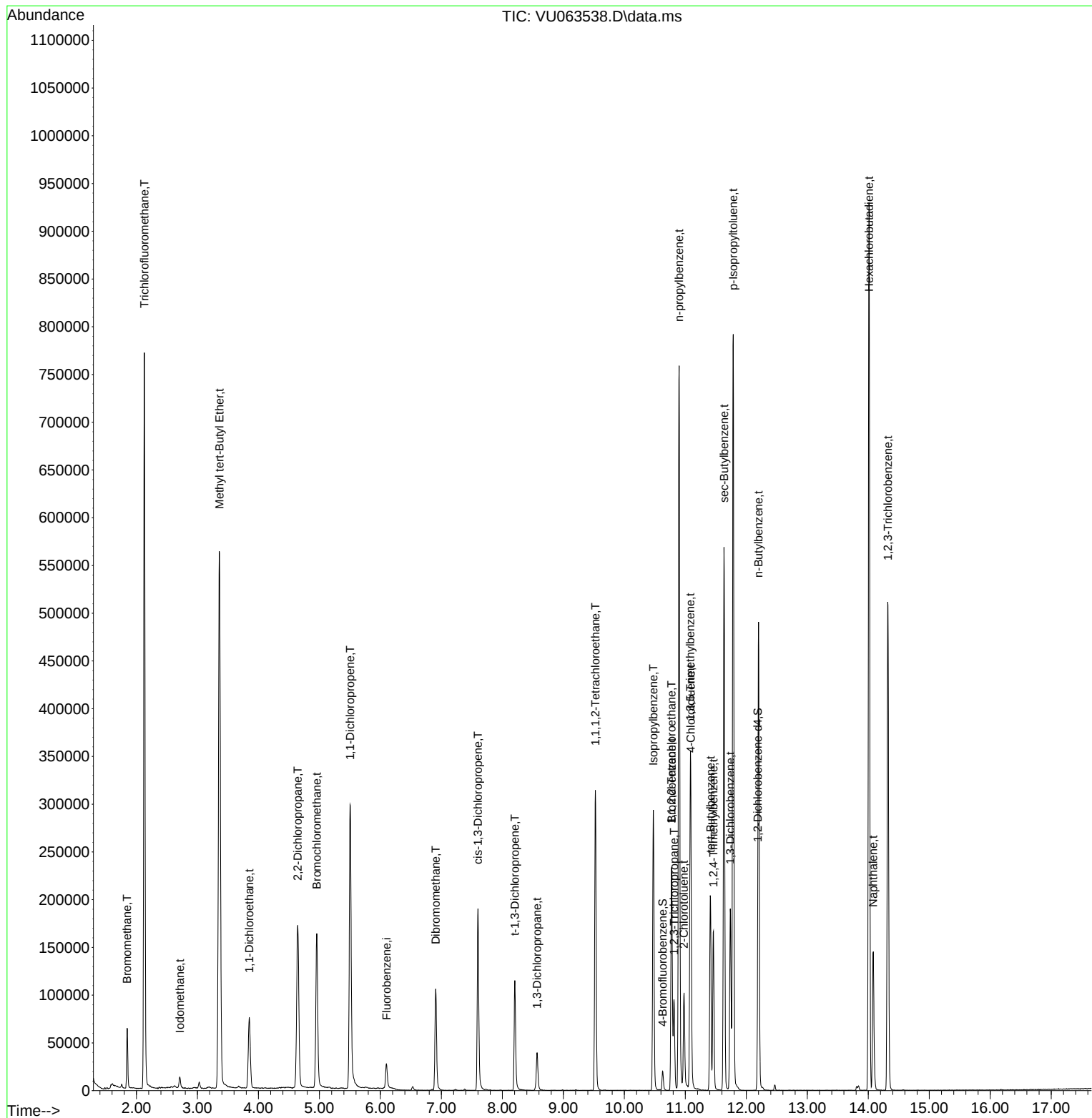
Internal Standards						
1) Fluorobenzene	6.100	96	23904	1.000	ug/l	# 0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.627	95	7393	0.817	ug/l	0.00
Spiked Amount 1.000			Recovery	=	82.000%	
68) 1,2-Dichlorobenzene-d4	12.187	152	7696	0.919	ug/l	0.00
Spiked Amount 1.000			Recovery	=	92.000%	
Target Compounds						
					Qvalue	
5) Bromomethane	1.846	94	28791	4.575	ug/l	98
7) Trichlorofluoromethane	2.129	101	484716	40.458	ug/l	99
10) Iodomethane	2.711	142	11066	1.999	ug/l	99
17) 1,1-Dichloroethane	3.850	63	85171	6.520	ug/l	100
21) 2,2-Dichloropropane	4.644	77	121201	10.895	ug/l	94
25) Methyl tert-Butyl Ether	3.361	73	632025	39.011	ug/l	99
26) Bromochloromethane	4.956	128	47356	14.830	ug/l	94
29) 1,1-Dichloropropene	5.502	75	168120	16.041	ug/l	97
43) Dibromomethane	6.907	93	44789	13.118	ug/l	92
50) t-1,3-Dichloropropene	8.203	75	62550	10.354	ug/l	99
51) cis-1,3-Dichloropropene	7.599	75	108466	13.377	ug/l	99
53) 1,3-Dichloropropane	8.570	76	24373	3.071	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.525	131	74863	13.183	ug/l	98
69) Isopropylbenzene	10.476	105	185978	6.778	ug/l	99
70) 1,1,2,2-Tetrachloroethane	10.772	83	66756	11.935	ug/l	99
71) 1,2,3-Trichloropropane	10.814	75	37017	8.149	ug/l	# 99
72) Bromobenzene	10.775	156	26381	3.725	ug/l	93
73) n-propylbenzene	10.898	120	130415	15.789	ug/l	93
74) 2-Chlorotoluene	10.978	126	18387	2.519	ug/l	75
75) 1,3,5-Trimethylbenzene	11.081	105	108236	4.129	ug/l	99
76) 4-Chlorotoluene	11.090	126	38182	5.150	ug/l	95
77) tert-Butylbenzene	11.412	119	94842	3.786	ug/l	90
78) 1,2,4-Trimethylbenzene	11.460	105	90493	3.480	ug/l	97
79) sec-Butylbenzene	11.634	105	373830	11.066	ug/l	97
81) p-Isopropyltoluene	11.785	119	431340	15.296	ug/l	99
82) 1,3-Dichlorobenzene	11.737	146	75296	5.314	ug/l	98
84) n-Butylbenzene	12.200	91	260912	9.976	ug/l	98
88) Hexachlorobutadiene	14.013	225	139099	29.590	ug/l	99
89) Naphthalene	14.081	128	120383	8.116	ug/l	100
90) 1,2,3-Trichlorobenzene	14.322	180	146549	19.158	ug/l	98

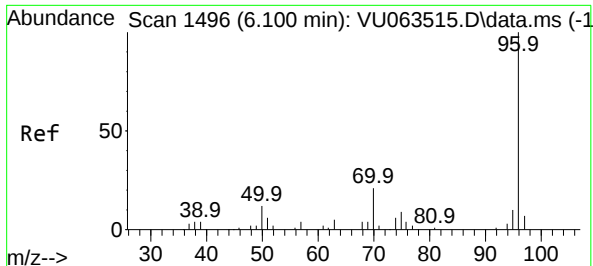
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU071825\
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Quant Time: Jul 18 23:50:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\524U071625DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Thu Jul 17 03:49:40 2025
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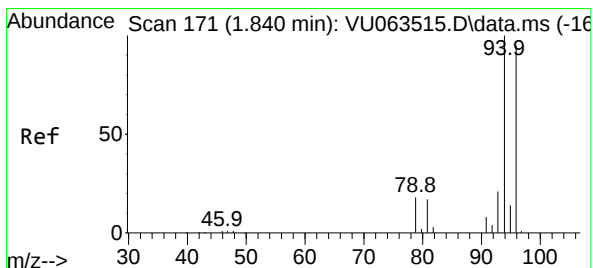
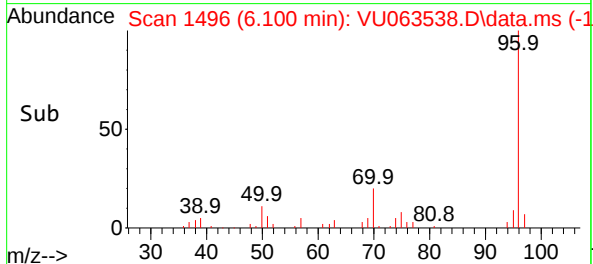
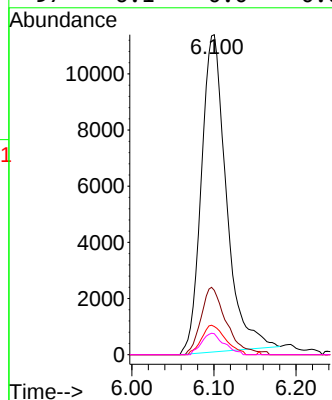
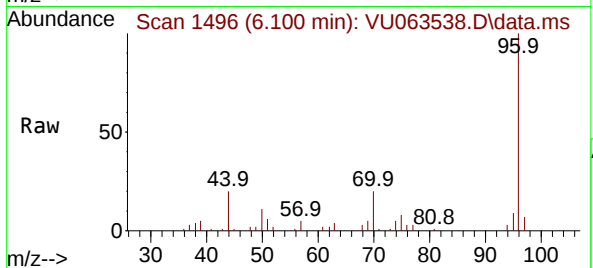




#1
Fluorobenzene
Concen: 1.000 ug/l
RT: 6.100 min Scan# 1496
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

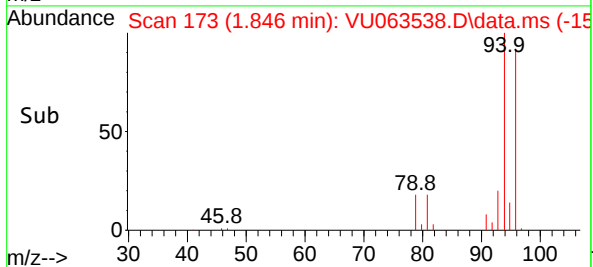
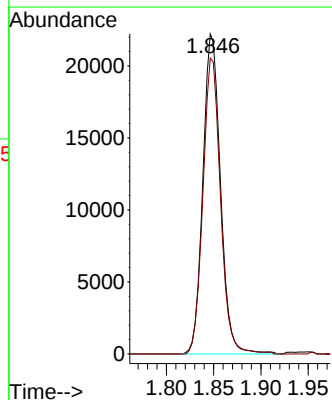
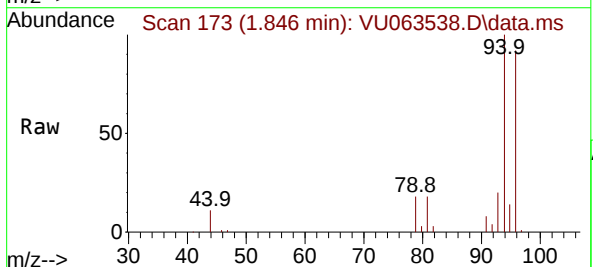
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

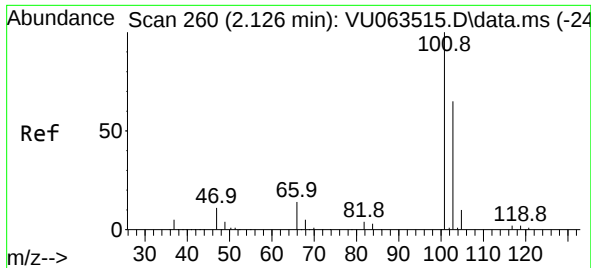
Tgt Ion:	96	Resp:	23904
Ion Ratio	Lower	Upper	
96	100		
70	21.5	15.0	22.4
95	8.9	7.4	11.0
97	6.1	0.0	0.0



#5
Bromomethane
Concen: 4.575 ug/l
RT: 1.846 min Scan# 173
Delta R.T. 0.007 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:	94	Resp:	28791
Ion Ratio	Lower	Upper	
94	100		
96	92.4	75.8	113.6

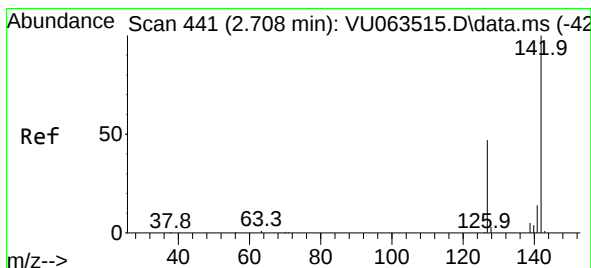
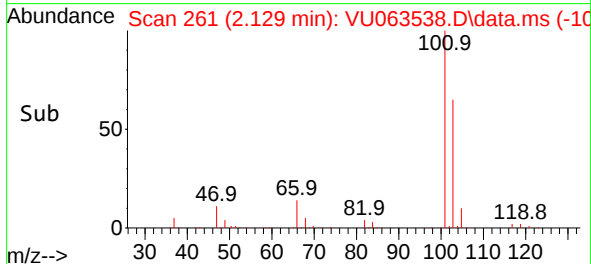
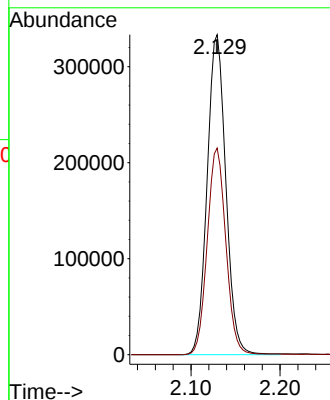
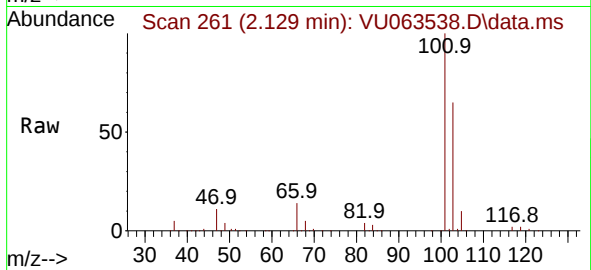




#7
 Trichlorofluoromethane
 Concen: 40.458 ug/l
 RT: 2.129 min Scan# 2
 Delta R.T. 0.003 min
 Lab File: VU063538.D
 Acq: 18 Jul 2025 15:54

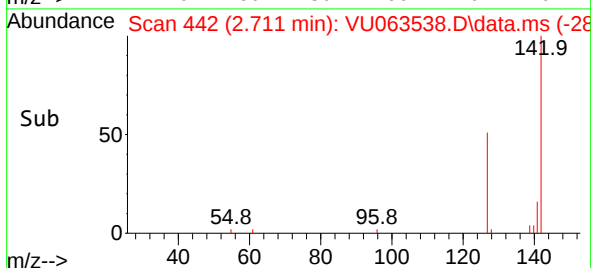
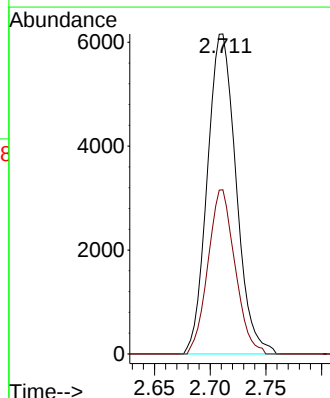
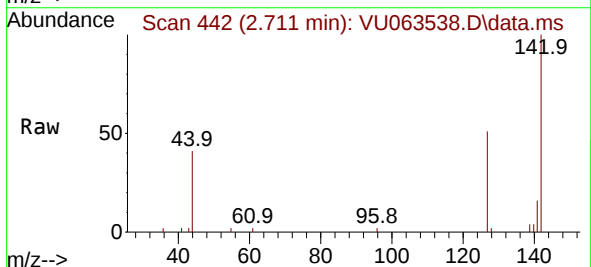
Instrument :
 MSVOA_U
 ClientSampleId :
 WS0725-PT-UNRVOA-WS

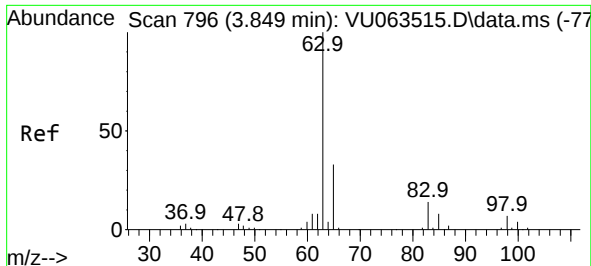
Tgt Ion:101 Resp: 484716
 Ion Ratio Lower Upper
 101 100
 103 64.6 52.2 78.4



#10
 Iodomethane
 Concen: 1.999 ug/l
 RT: 2.711 min Scan# 442
 Delta R.T. 0.003 min
 Lab File: VU063538.D
 Acq: 18 Jul 2025 15:54

Tgt Ion:142 Resp: 11066
 Ion Ratio Lower Upper
 142 100
 127 48.3 37.9 56.9





#17

1,1-Dichloroethane

Concen: 6.520 ug/l

RT: 3.850 min Scan# 796

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

WS0725-PT-UNRVOA-WS

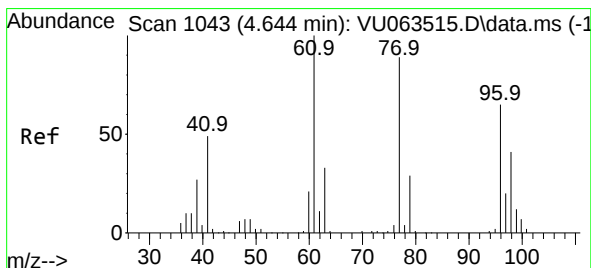
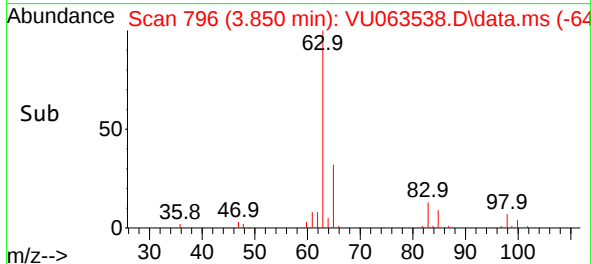
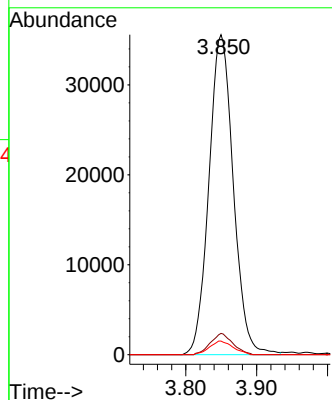
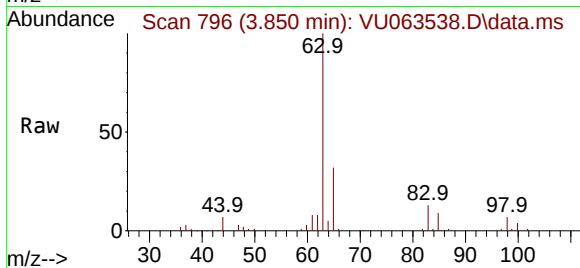
Tgt Ion: 63 Resp: 85171

Ion Ratio Lower Upper

63 100

98 6.6 3.4 10.2

100 4.3 2.1 6.2



#21

2,2-Dichloropropane

Concen: 10.895 ug/l

RT: 4.644 min Scan# 1043

Delta R.T. 0.000 min

Lab File: VU063538.D

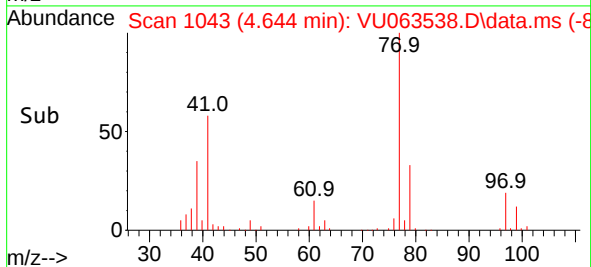
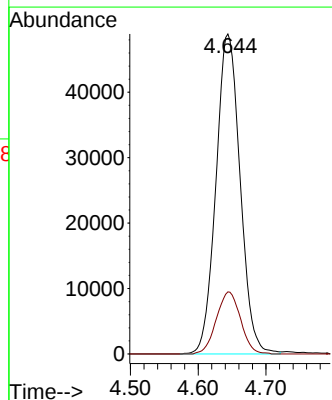
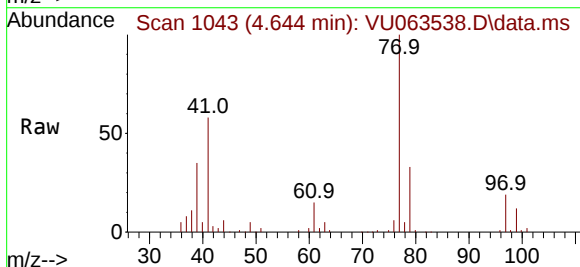
Acq: 18 Jul 2025 15:54

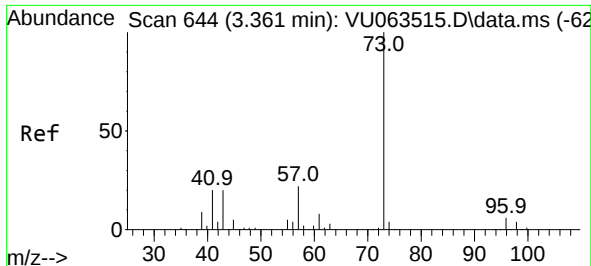
Tgt Ion: 77 Resp: 121201

Ion Ratio Lower Upper

77 100

97 19.5 17.8 26.8

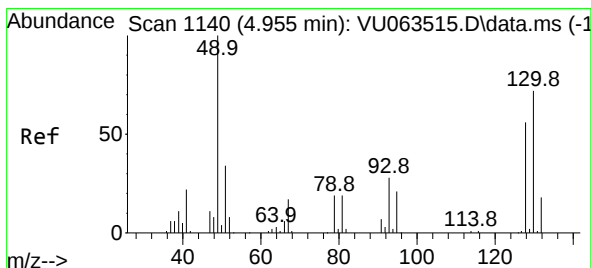
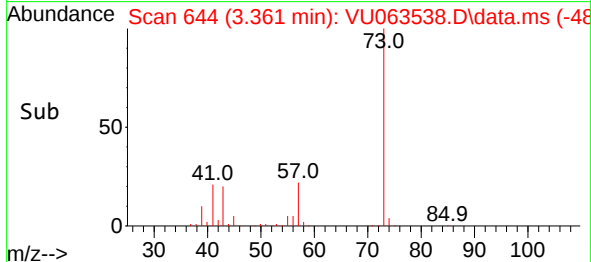
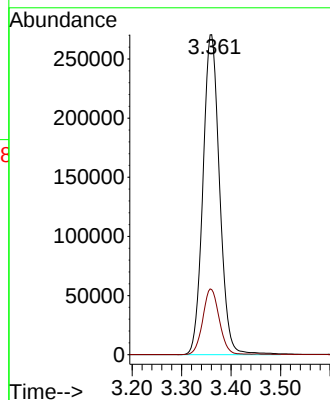
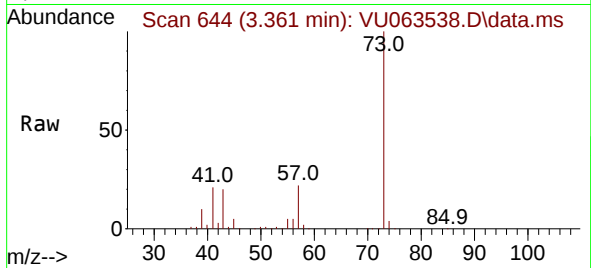




#25
Methyl tert-Butyl Ether
Concen: 39.011 ug/l
RT: 3.361 min Scan# 644
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

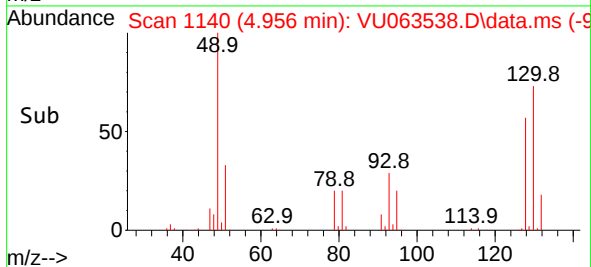
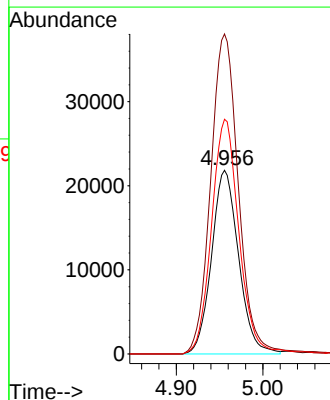
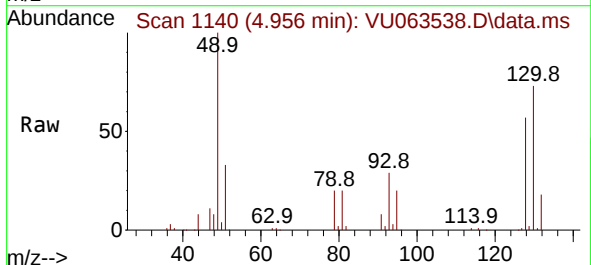
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WS0725-PT-UNRVOA-WS

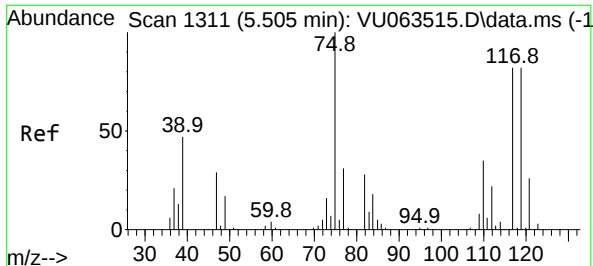
Tgt Ion: 73 Resp: 632025
Ion Ratio Lower Upper
73 100
43 20.4 16.2 24.2



#26
Bromochloromethane
Concen: 14.830 ug/l
RT: 4.956 min Scan# 1140
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion: 128 Resp: 47356
Ion Ratio Lower Upper
128 100
49 179.4 0.0 340.8
130 130.4 100.5 150.7

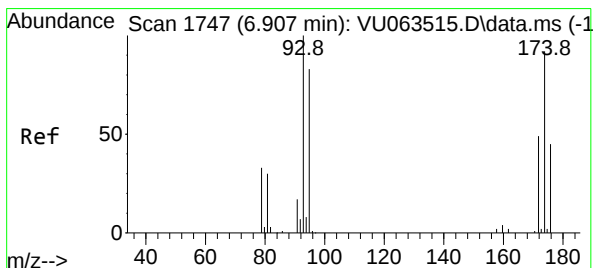
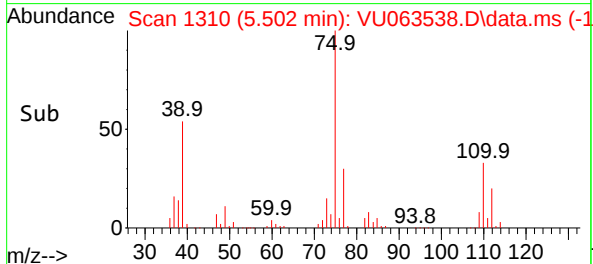
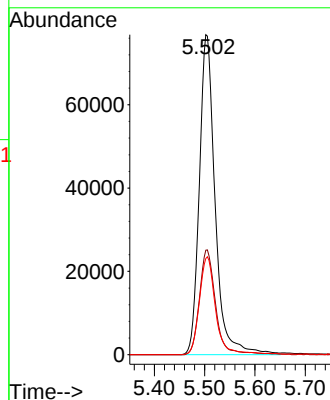
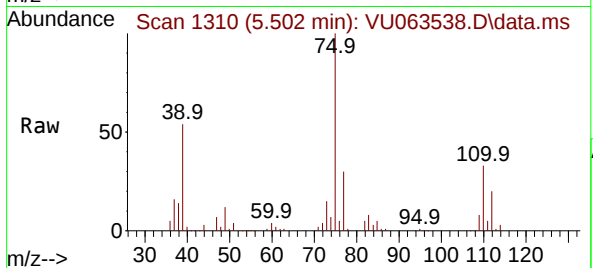




#29
1,1-Dichloropropene
Concen: 16.041 ug/l
RT: 5.502 min Scan# 11
Delta R.T. -0.003 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

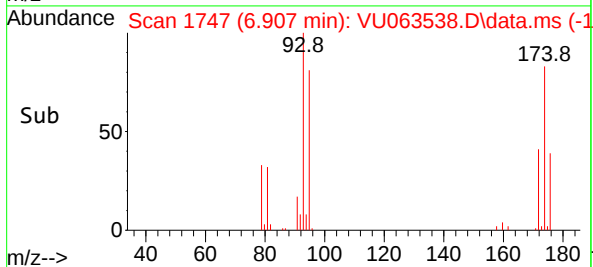
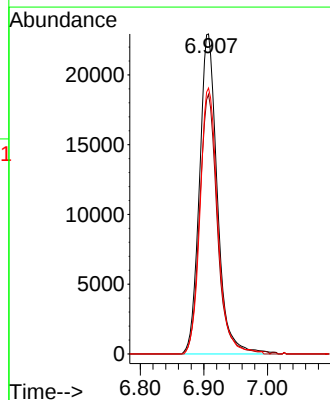
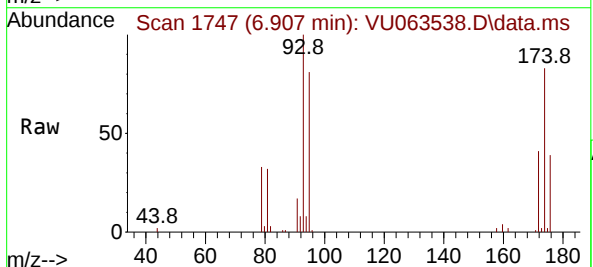
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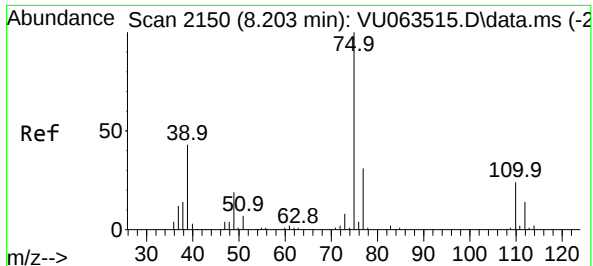
Tgt Ion: 75 Resp: 168120
Ion Ratio Lower Upper
75 100
110 33.1 17.8 53.4
77 31.4 24.6 37.0



#43
Dibromomethane
Concen: 13.118 ug/l
RT: 6.907 min Scan# 1747
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion: 93 Resp: 44789
Ion Ratio Lower Upper
93 100
95 80.3 67.9 101.9
174 82.5 74.6 111.8





#50

t-1,3-Dichloropropene

Concen: 10.354 ug/l

RT: 8.203 min Scan# 2150

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

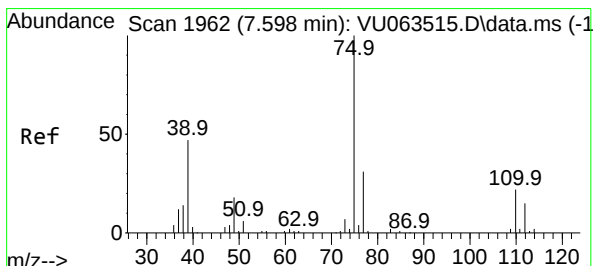
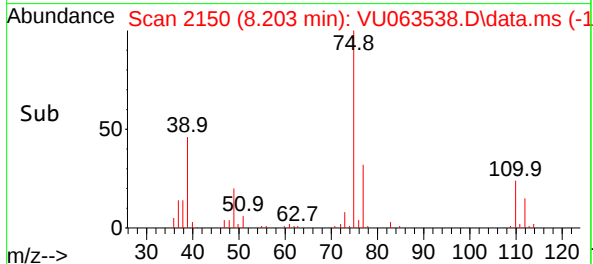
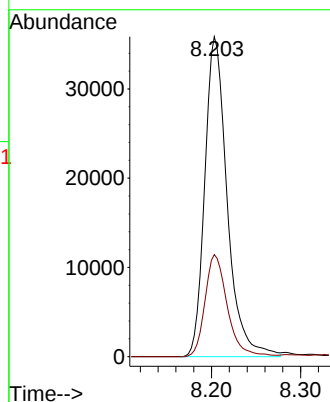
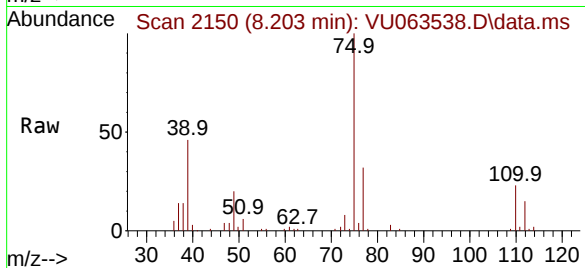
WS0725-PT-UNRVOA-WS

Tgt Ion: 75 Resp: 62550

Ion Ratio Lower Upper

75 100

77 31.9 24.9 37.3



#51

cis-1,3-Dichloropropene

Concen: 13.377 ug/l

RT: 7.599 min Scan# 1962

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

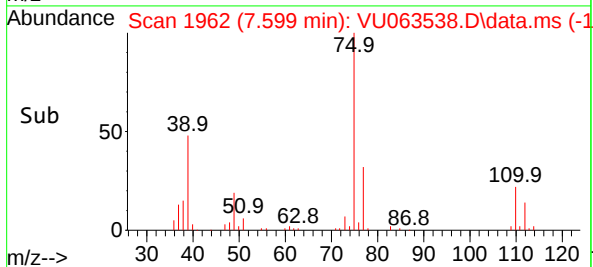
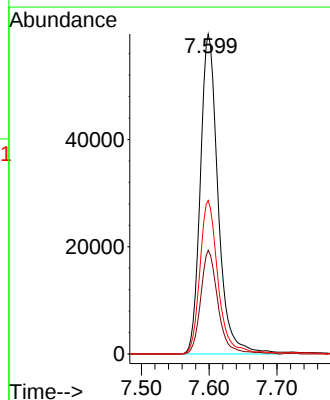
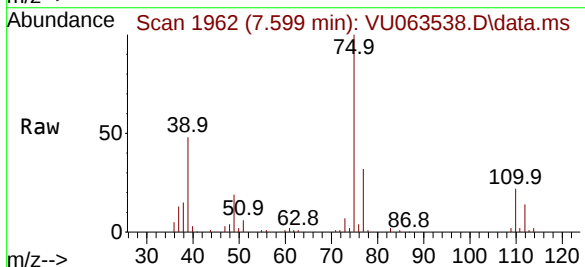
Tgt Ion: 75 Resp: 108466

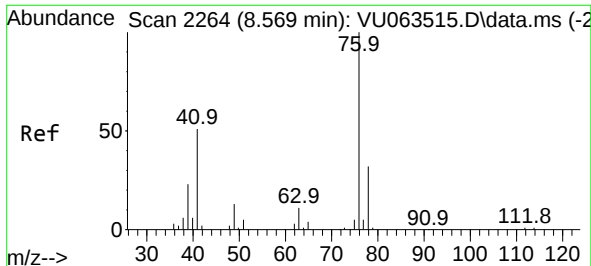
Ion Ratio Lower Upper

75 100

77 32.4 25.1 37.7

39 48.0 37.8 56.6





#53

1,3-Dichloropropane

Concen: 3.071 ug/l

RT: 8.570 min Scan# 21

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

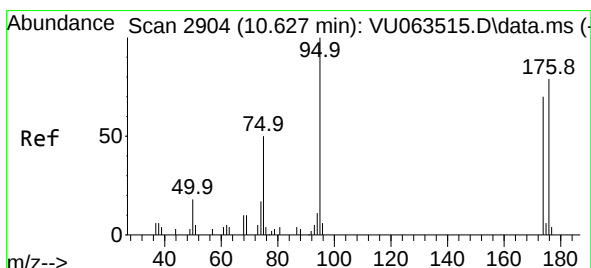
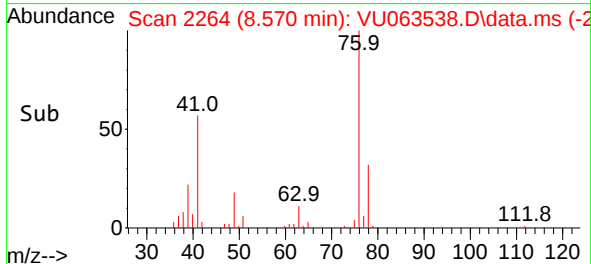
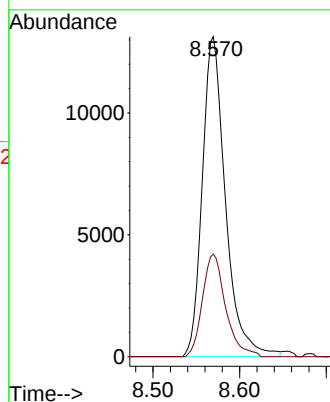
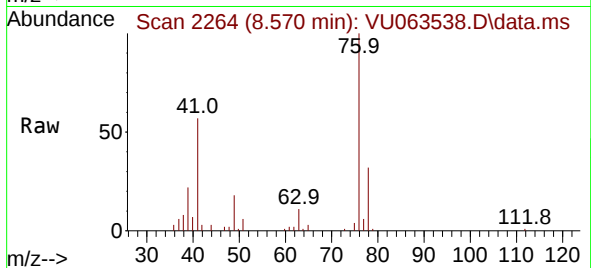
WS0725-PT-UNRVOA-WS

Tgt Ion: 76 Resp: 24373

Ion Ratio Lower Upper

76 100

78 32.0 26.0 39.0



#57

4-Bromofluorobenzene

Concen: 0.817 ug/l

RT: 10.627 min Scan# 2904

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

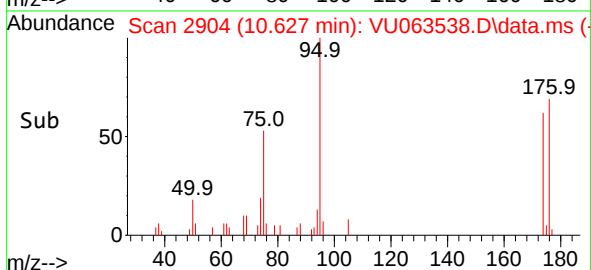
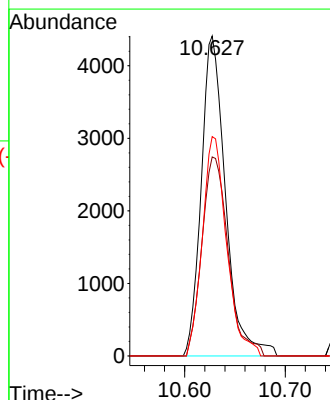
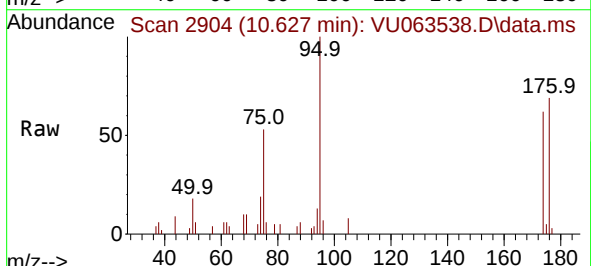
Tgt Ion: 95 Resp: 7393

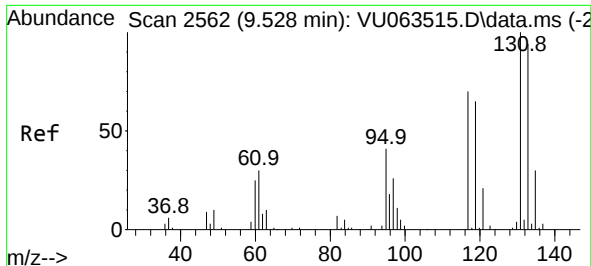
Ion Ratio Lower Upper

95 100

174 67.4 59.8 89.8

176 68.5 61.8 92.8

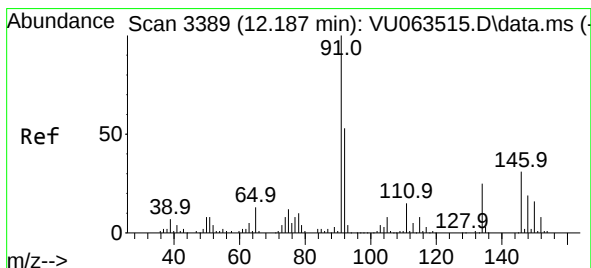
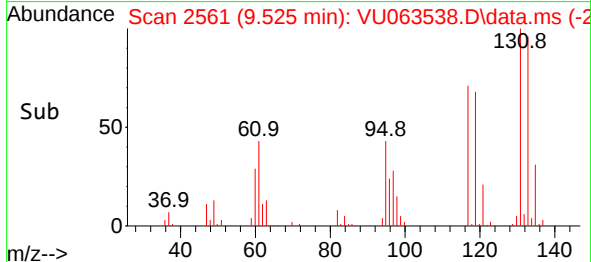
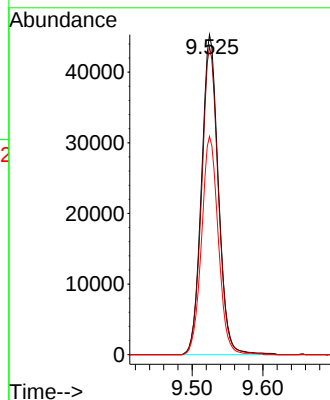
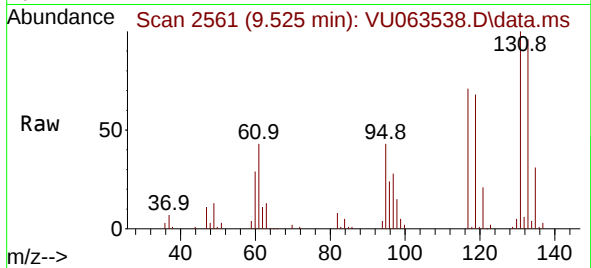




#60
 1,1,1,2-Tetrachloroethane
 Concen: 13.183 ug/l
 RT: 9.525 min Scan# 21
 Delta R.T. -0.003 min
 Lab File: VU063538.D
 Acq: 18 Jul 2025 15:54

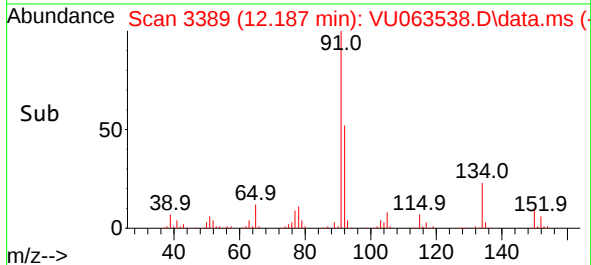
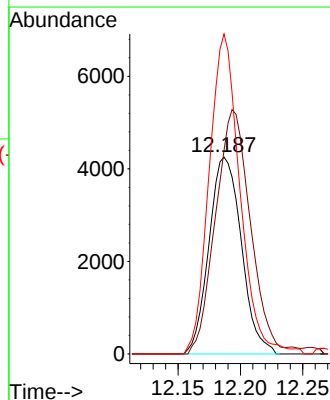
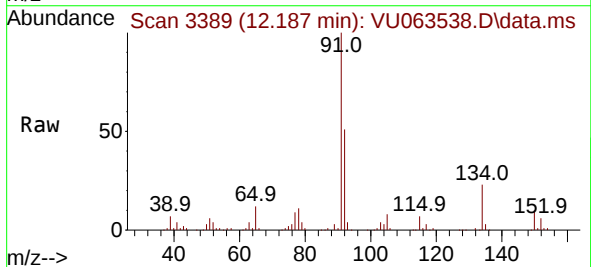
Instrument :
 MSVOA_U
 ClientSampleId :
 WS0725-PT-UNRVOA-WS

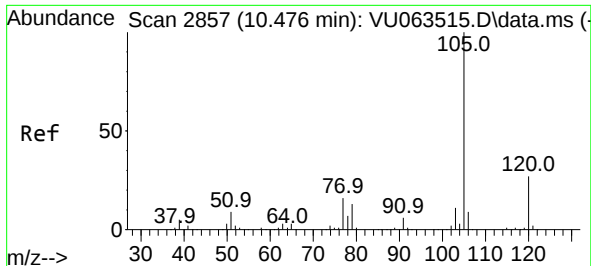
Tgt Ion:131 Resp: 74863
 Ion Ratio Lower Upper
 131 100
 133 95.6 74.7 112.1
 119 67.3 53.0 79.4



#68
 1,2-Dichlorobenzene-d4
 Concen: 0.919 ug/l
 RT: 12.187 min Scan# 3389
 Delta R.T. 0.000 min
 Lab File: VU063538.D
 Acq: 18 Jul 2025 15:54

Tgt Ion:152 Resp: 7696
 Ion Ratio Lower Upper
 152 100
 115 133.0 0.0 262.2
 150 154.7 0.0 651.2

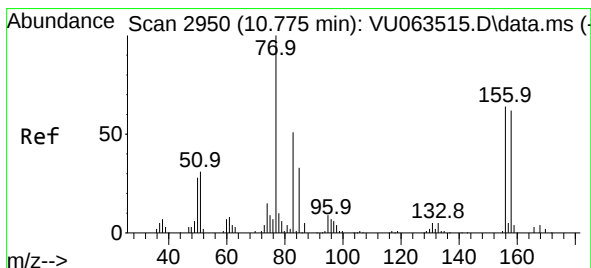
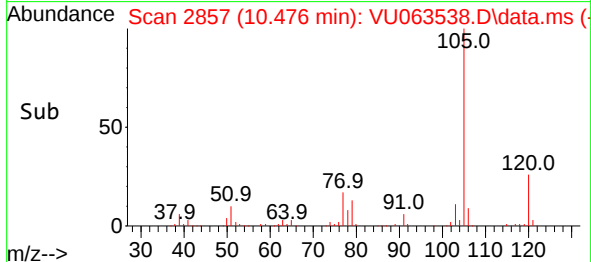
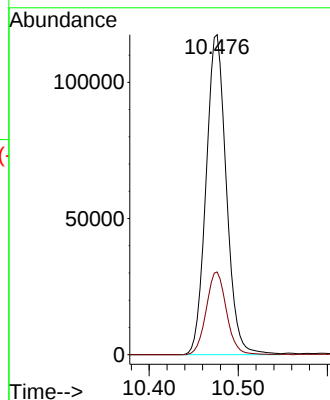
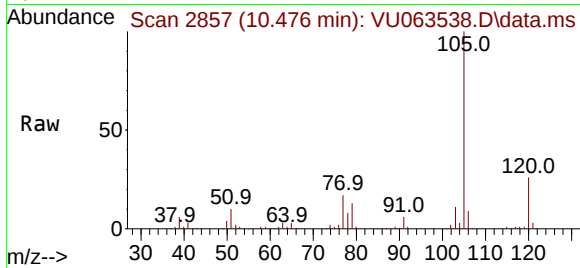




#69
Isopropylbenzene
Concen: 6.778 ug/l
RT: 10.476 min Scan# 21
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

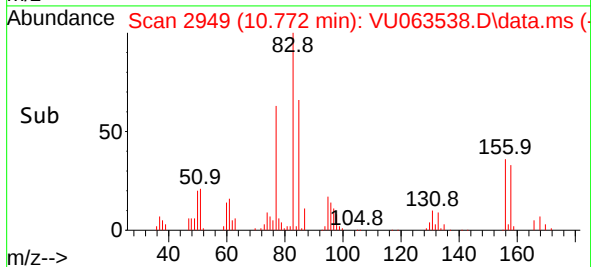
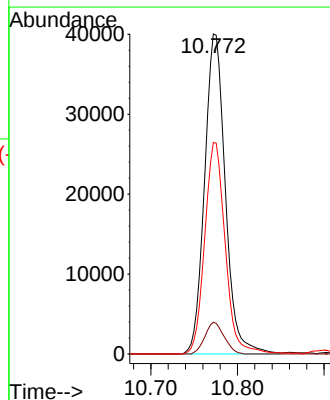
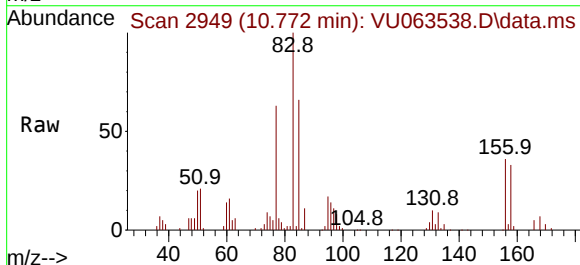
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

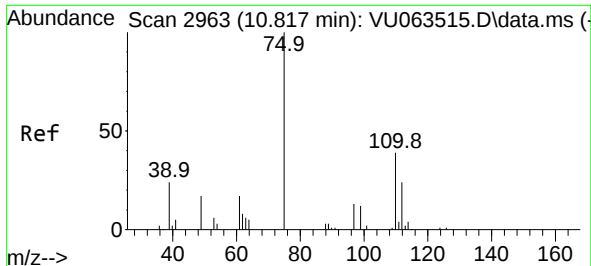
Tgt Ion:105 Resp: 185978
Ion Ratio Lower Upper
105 100
120 25.8 13.2 39.5



#70
1,1,2,2-Tetrachloroethane
Concen: 11.935 ug/l
RT: 10.772 min Scan# 2949
Delta R.T. -0.003 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion: 83 Resp: 66756
Ion Ratio Lower Upper
83 100
131 9.1 8.4 12.6
85 65.4 51.9 77.9

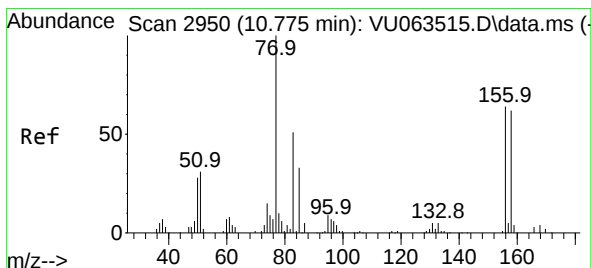
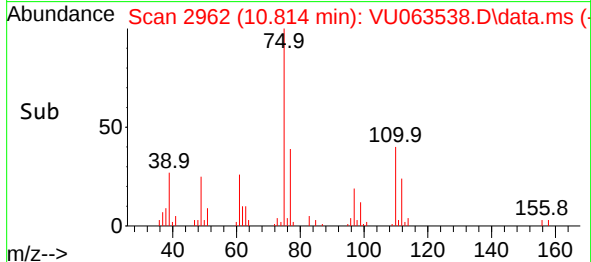
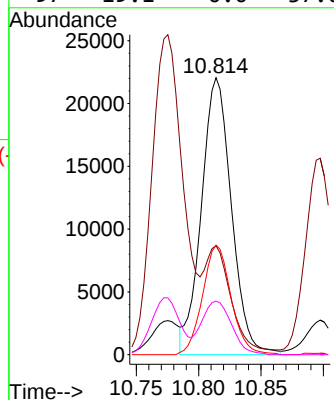
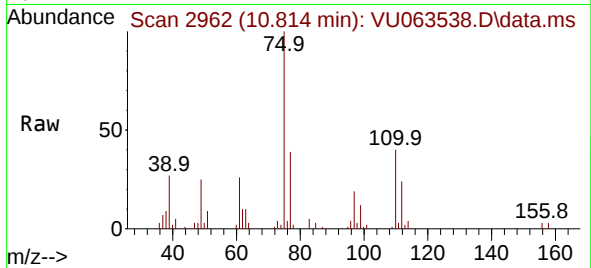




#71
1,2,3-Trichloropropane
Concen: 8.149 ug/l
RT: 10.814 min Scan# 2962
Delta R.T. -0.003 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

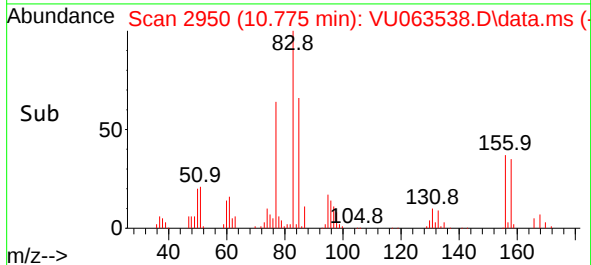
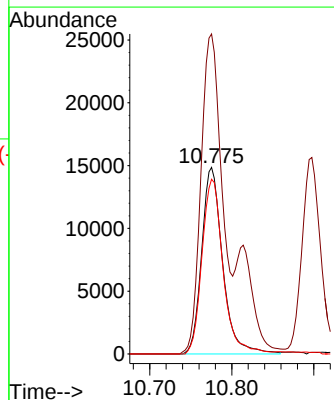
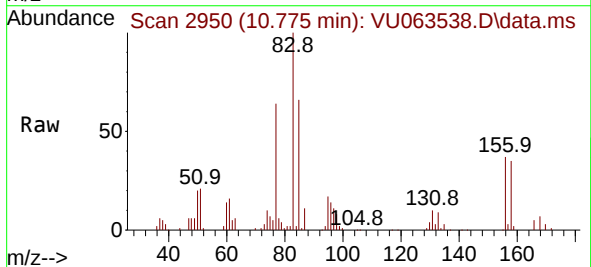
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

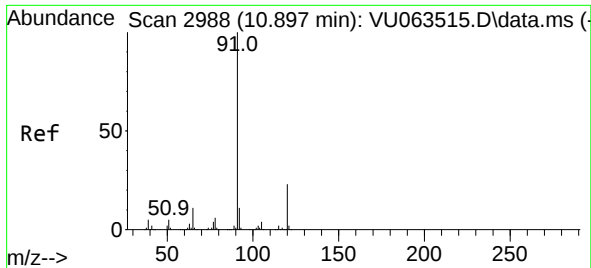
Tgt Ion: 75 Resp: 37017
Ion Ratio Lower Upper
75 100
77 34.1 0.0 0.0#
110 37.5 0.0 73.2
97 19.1 0.0 37.6



#72
Bromobenzene
Concen: 3.725 ug/l
RT: 10.775 min Scan# 2950
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:156 Resp: 26381
Ion Ratio Lower Upper
156 100
77 170.8 0.0 315.2
158 94.6 0.0 195.4

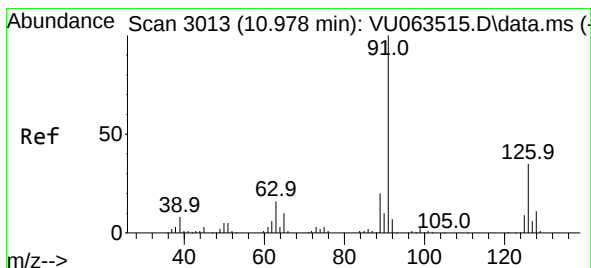
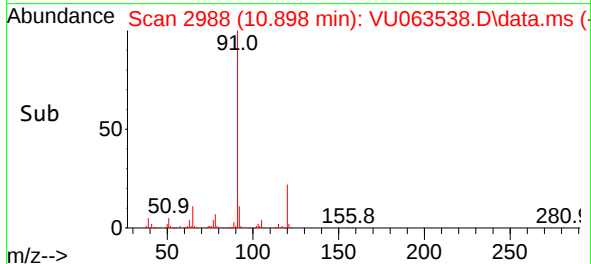
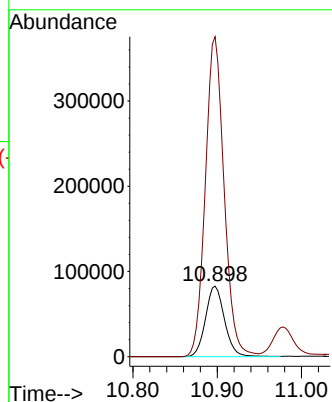
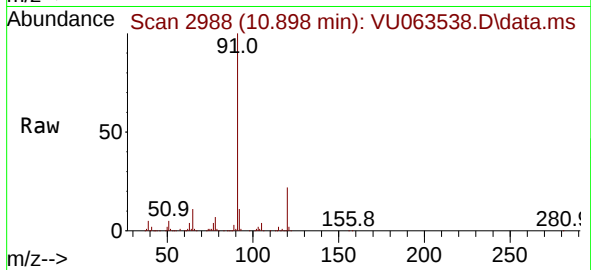




#73
n-propylbenzene
Concen: 15.789 ug/l
RT: 10.898 min Scan# 2988
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

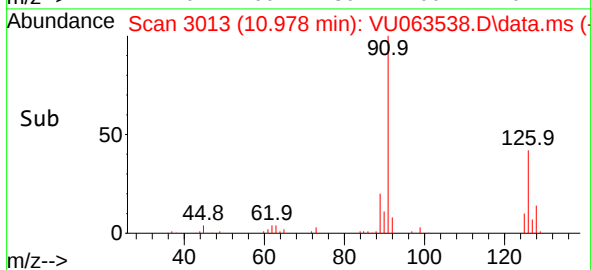
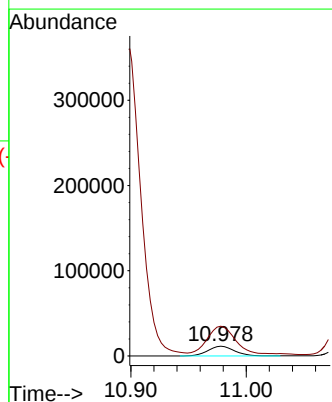
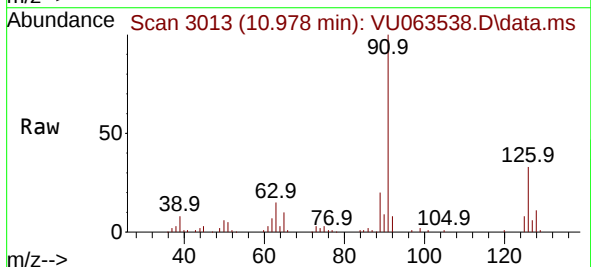
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

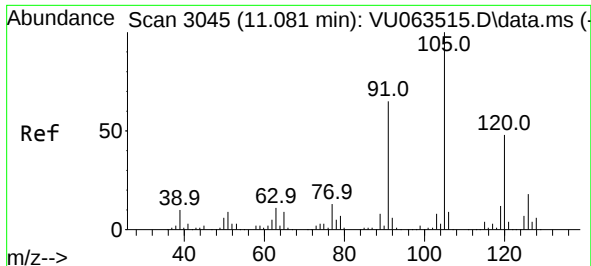
Tgt Ion:120 Resp: 130415
Ion Ratio Lower Upper
120 100
91 447.2 343.1 514.7



#74
2-Chlorotoluene
Concen: 2.519 ug/l
RT: 10.978 min Scan# 3013
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:126 Resp: 18387
Ion Ratio Lower Upper
126 100
91 352.7 0.0 606.0

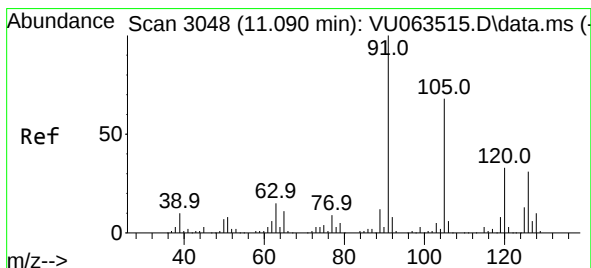
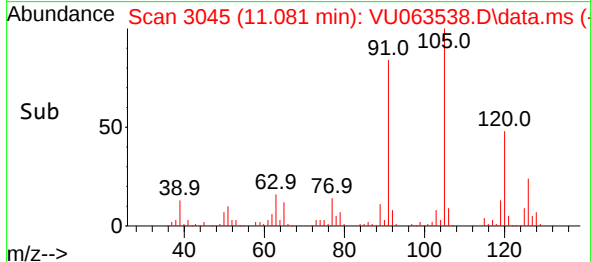
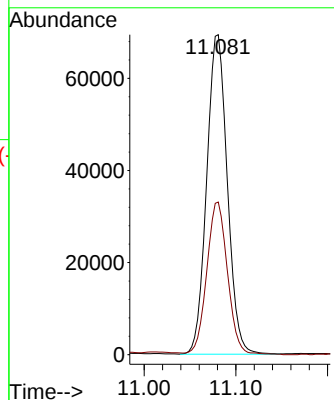
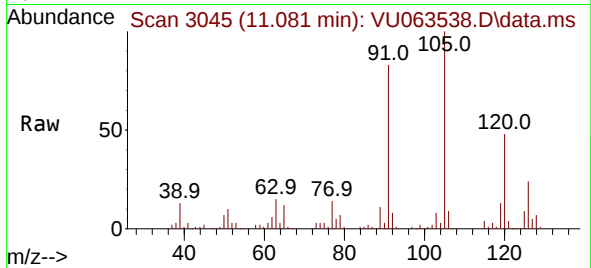




#75
1,3,5-Trimethylbenzene
Concen: 4.129 ug/l
RT: 11.081 min Scan# 3045
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

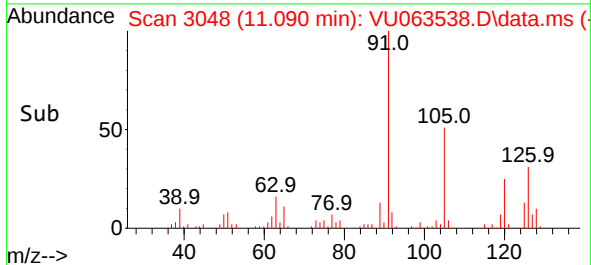
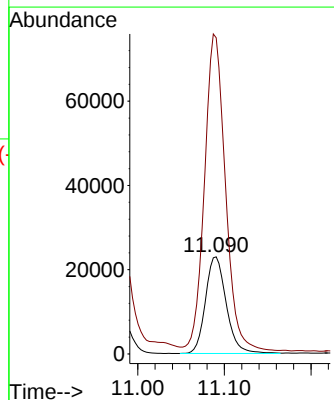
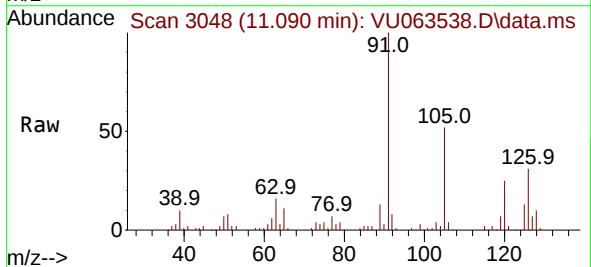
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

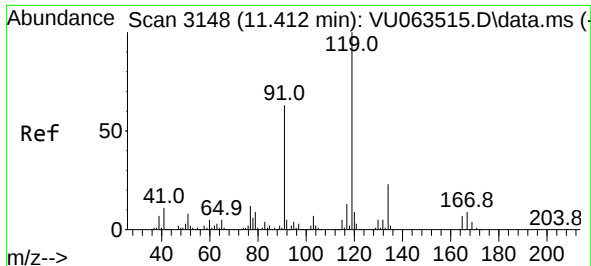
Tgt Ion:105 Resp: 108236
Ion Ratio Lower Upper
105 100
120 48.2 37.8 56.8



#76
4-Chlorotoluene
Concen: 5.150 ug/l
RT: 11.090 min Scan# 3048
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:126 Resp: 38182
Ion Ratio Lower Upper
126 100
91 331.3 0.0 682.2

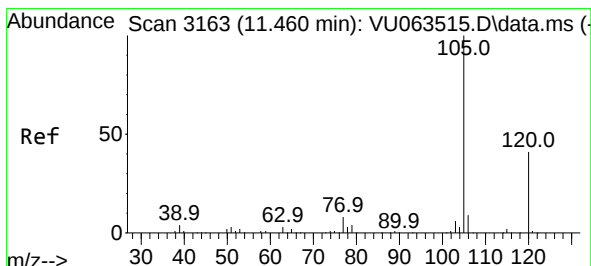
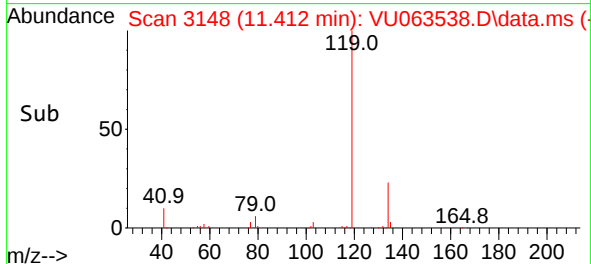
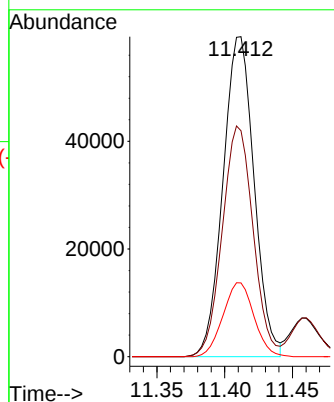
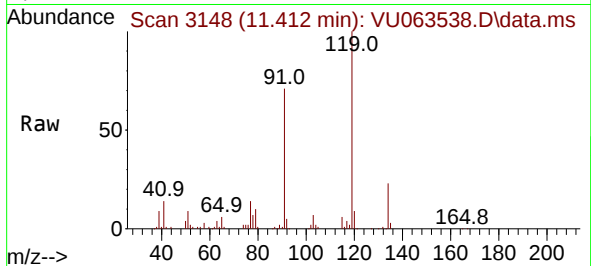




#77
tert-Butylbenzene
Concen: 3.786 ug/l
RT: 11.412 min Scan# 3148
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

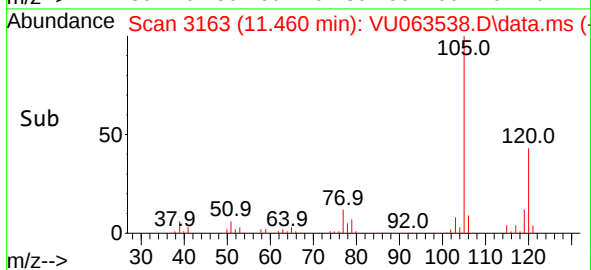
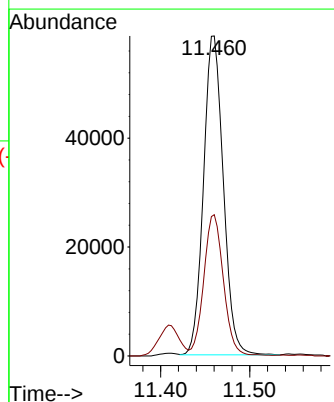
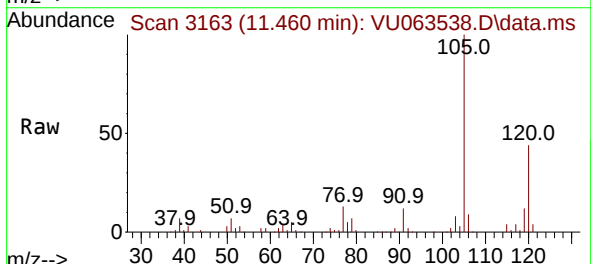
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

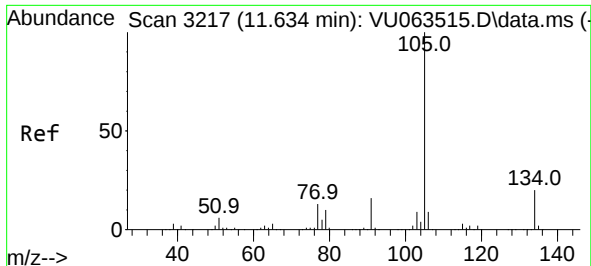
Tgt Ion:	119	Resp:	94842
Ion Ratio	Lower	Upper	
119	100		
91	71.6	30.7	92.1
134	23.1	18.5	27.7



#78
1,2,4-Trimethylbenzene
Concen: 3.480 ug/l
RT: 11.460 min Scan# 3163
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:	105	Resp:	90493
Ion Ratio	Lower	Upper	
105	100		
120	43.6	22.7	68.0

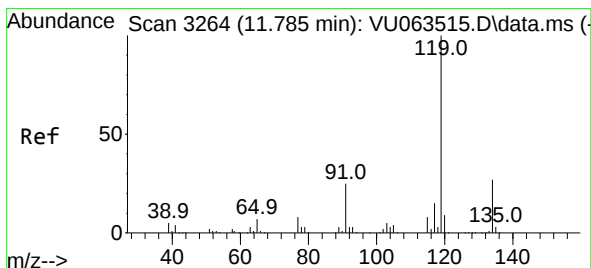
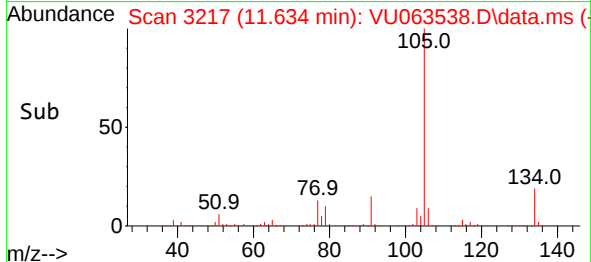
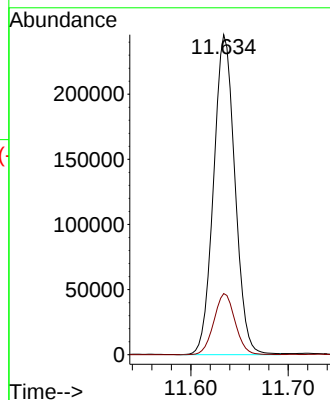
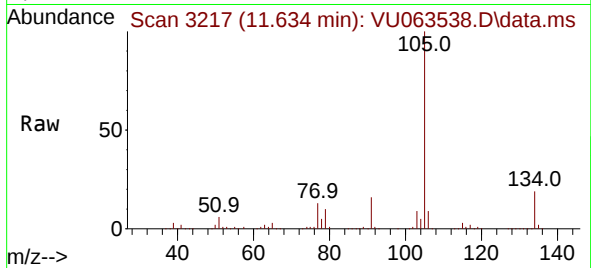




#79
sec-Butylbenzene
Concen: 11.066 ug/l
RT: 11.634 min Scan# 3217
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

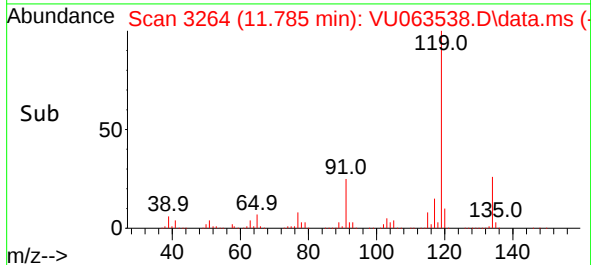
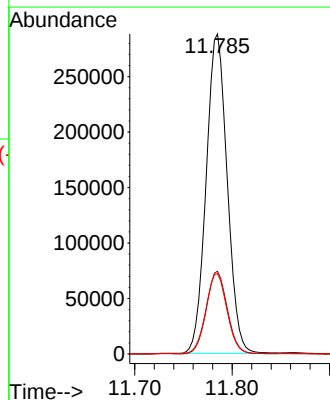
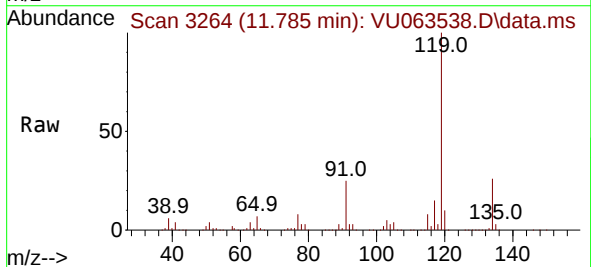
Instrument :
MSVOA_U
ClientSampleId :
WS0725-PT-UNRVOA-WS

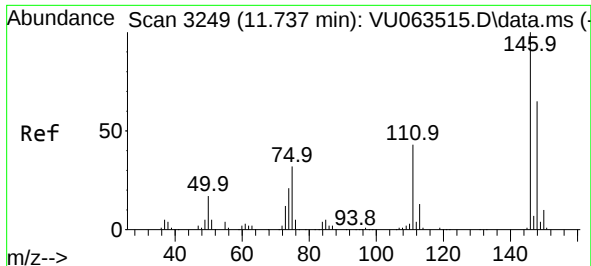
Tgt Ion:105 Resp: 373830
Ion Ratio Lower Upper
105 100
134 19.0 16.2 24.4



#81
p-Isopropyltoluene
Concen: 15.296 ug/l
RT: 11.785 min Scan# 3264
Delta R.T. 0.000 min
Lab File: VU063538.D
Acq: 18 Jul 2025 15:54

Tgt Ion:119 Resp: 431340
Ion Ratio Lower Upper
119 100
134 25.7 21.1 31.7
91 25.1 19.8 29.8





#82

1,3-Dichlorobenzene

Concen: 5.314 ug/l

RT: 11.737 min Scan# 31

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

WS0725-PT-UNRVOA-WS

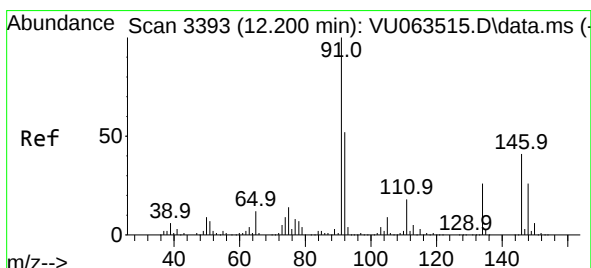
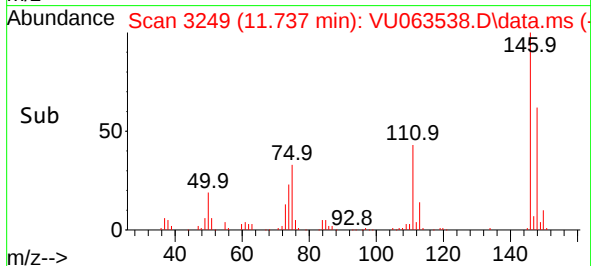
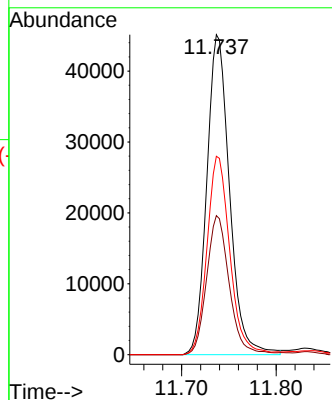
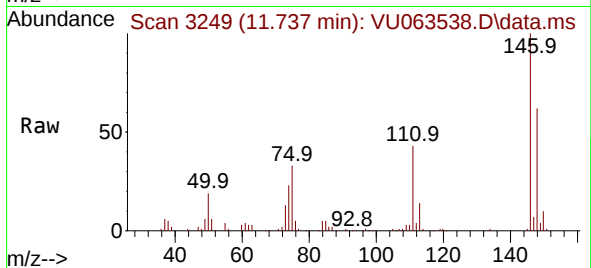
Tgt Ion:146 Resp: 75296

Ion Ratio Lower Upper

146 100

111 43.4 33.8 50.6

148 62.5 51.5 77.3



#84

n-Butylbenzene

Concen: 9.976 ug/l

RT: 12.200 min Scan# 3393

Delta R.T. -0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

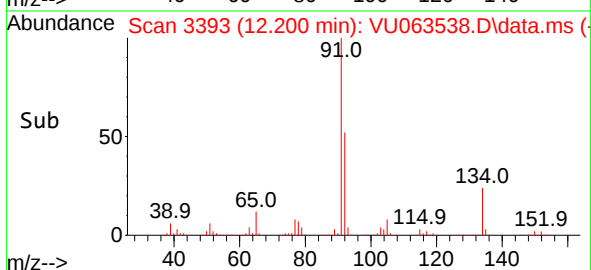
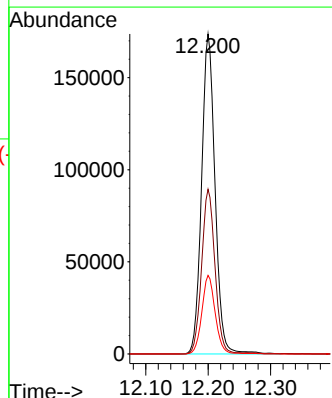
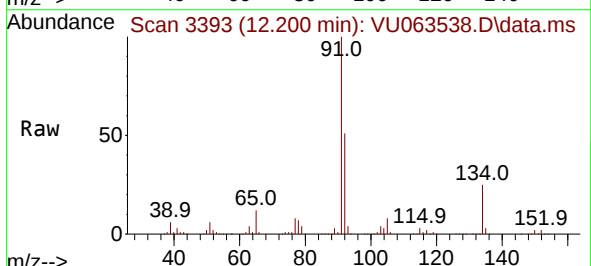
Tgt Ion: 91 Resp: 260912

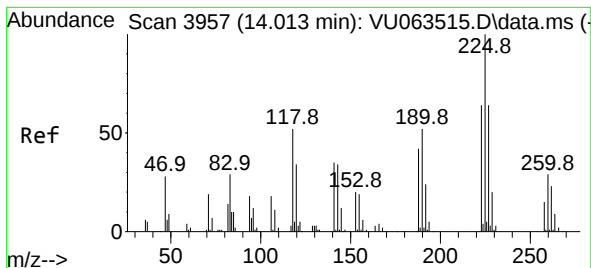
Ion Ratio Lower Upper

91 100

92 51.0 41.5 62.3

134 24.2 20.6 30.8





#88

Hexachlorobutadiene

Concen: 29.590 ug/l

RT: 14.013 min Scan# 3957

Delta R.T. 0.000 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

WS0725-PT-UNRVOA-WS

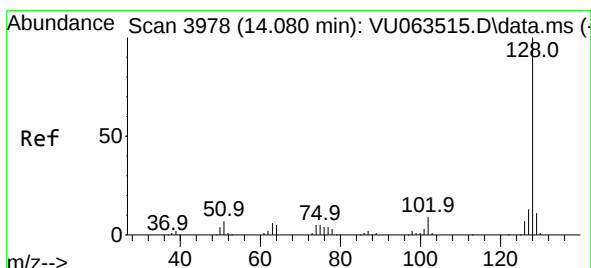
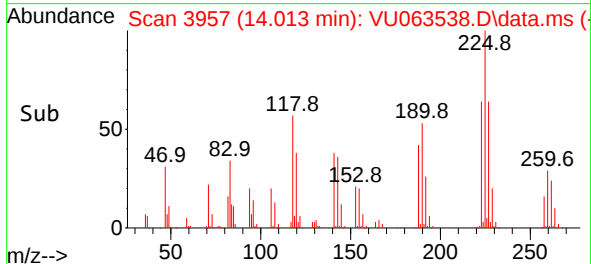
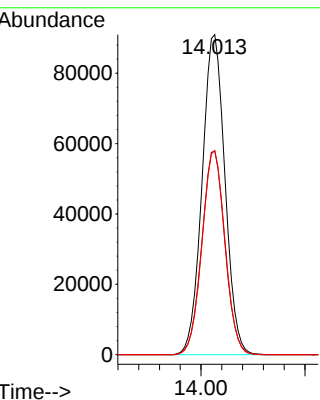
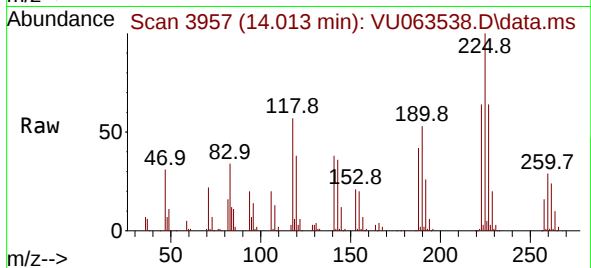
Tgt Ion:225 Resp: 139099

Ion Ratio Lower Upper

225 100

223 64.2 50.8 76.2

227 64.2 51.0 76.6



#89

Naphthalene

Concen: 8.116 ug/l

RT: 14.081 min Scan# 3978

Delta R.T. 0.001 min

Lab File: VU063538.D

Acq: 18 Jul 2025 15:54

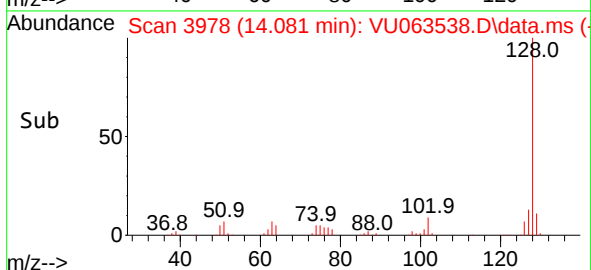
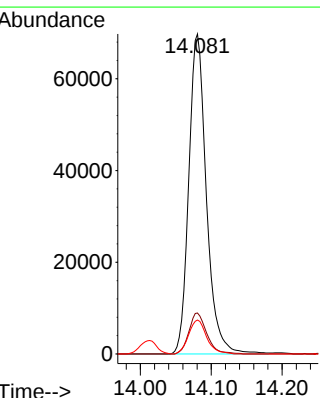
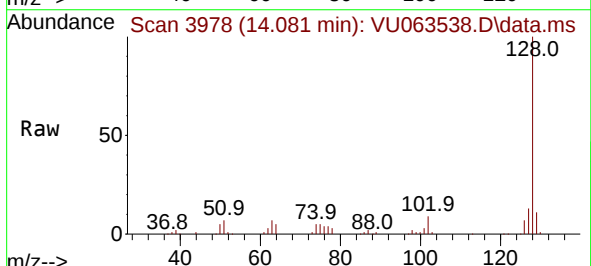
Tgt Ion:128 Resp: 120383

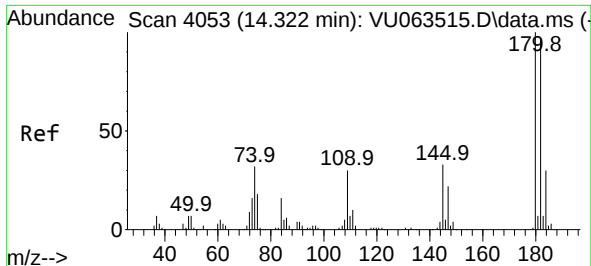
Ion Ratio Lower Upper

128 100

127 13.0 10.2 15.4

129 10.9 8.8 13.2





#90

1,2,3-Trichlorobenzene

Concen: 19.158 ug/l

RT: 14.322 min Scan# 4053

Delta R.T. 0.000 min

Lab File: VU063538.D

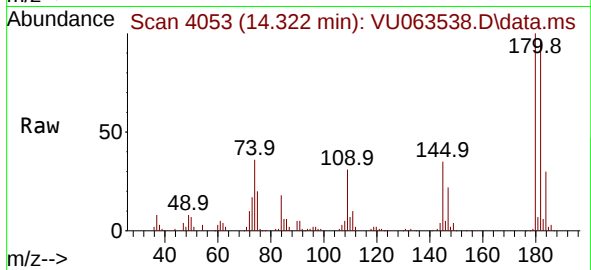
Acq: 18 Jul 2025 15:54

Instrument :

MSVOA_U

ClientSampleId :

WS0725-PT-UNRVOA-WS



Tgt Ion:180 Resp: 146549

Ion Ratio Lower Upper

180 100

182 95.8 78.0 117.0

145 35.0 27.3 40.9

