

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW082225\
 Data File : VW032118.D
 Acq On : 22 Aug 2025 17:56
 Operator : SY/MD
 Sample : Q2926-01
 Misc : 5.00g/5mL/MSVOA_W/SOIL/A
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 TR-04-08212025

Quant Time: Aug 25 04:00:34 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W081125S.M
 Quant Title : SW846 8260
 QLast Update : Tue Aug 12 04:04:48 2025
 Response via : Initial Calibration

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

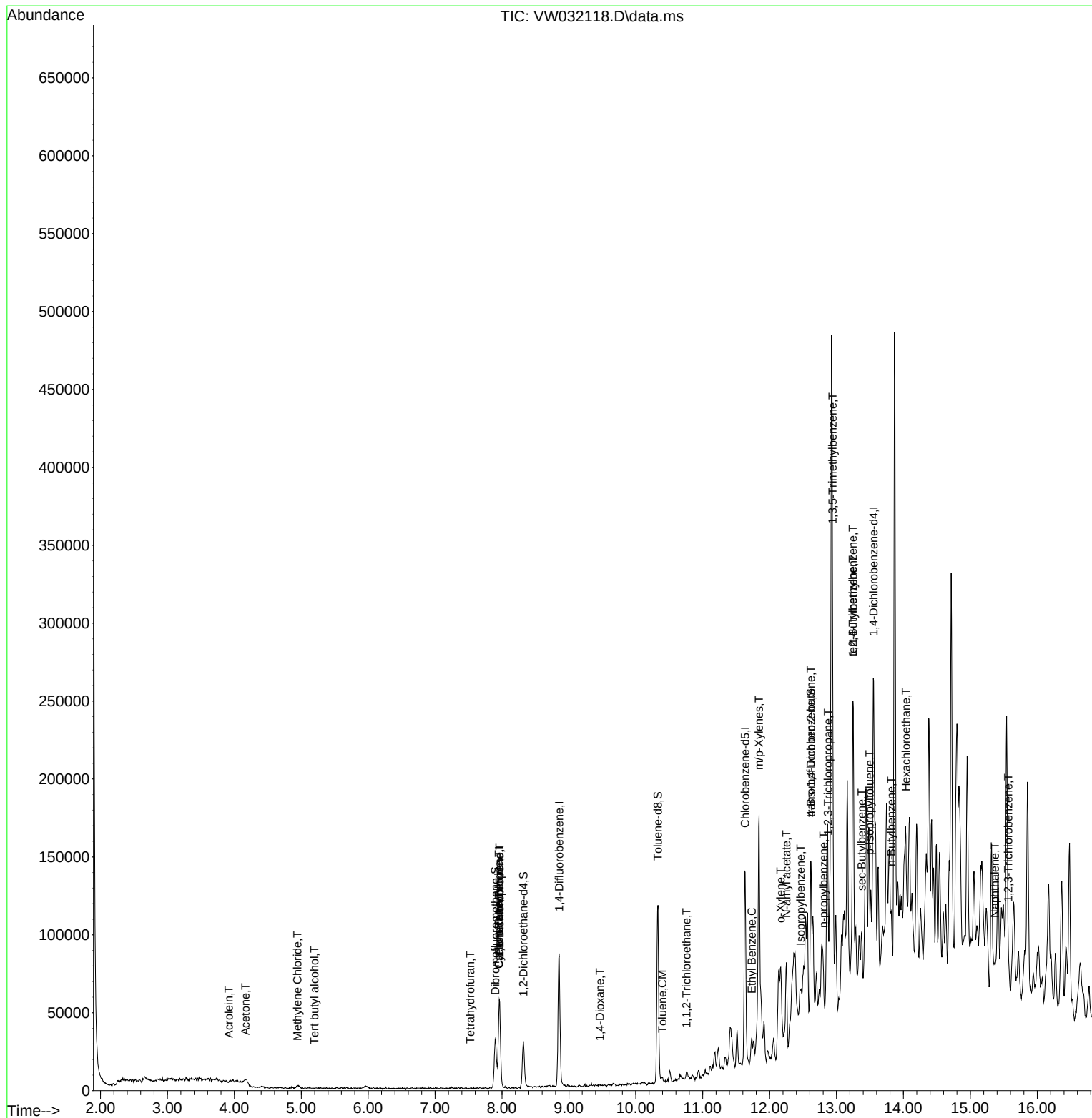
Internal Standards						
1) Pentafluorobenzene	7.959	168	39834	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	71007	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	70874	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.555	152	34804	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	23891	41.469	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	82.940%		
35) Dibromofluoromethane	7.898	113	22350	48.721	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	97.440%		
50) Toluene-d8	10.330	98	74776	44.071	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	88.140%		
62) 4-Bromofluorobenzene	12.617	95	30077	48.103	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	96.200%		
Target Compounds					Qvalue	
11) Tert butyl alcohol	5.197	59	76	2.037	ug/l #	1
13) Acrolein	3.917	56	101	1.699	ug/l #	8
16) Acetone	4.167	43	2268	17.003	ug/l #	86
20) Methylene Chloride	4.941	84	1263	2.048	ug/l #	81
29) Tetrahydrofuran	7.526	42	199	1.592	ug/l #	51
31) Cyclohexane	7.953	56	1338	1.630	ug/l #	55
36) 1,1-Dichloropropene	7.965	75	3527	5.454	ug/l #	48
38) Carbon Tetrachloride	7.953	117	4266	6.836	ug/l #	19
49) 1,4-Dioxane	9.465	88	83	20.481	ug/l #	1
52) Toluene	10.397	92	1485	1.173	ug/l	91
55) 1,1,2-Trichloroethane	10.757	97	2044	4.908	ug/l #	34
67) Ethyl Benzene	11.733	91	10091	3.862	ug/l	95
68) m/p-Xylenes	11.842	106	15623	15.494	ug/l	97
69) o-Xylene	12.165	106	10914	11.711	ug/l	95
73) Isopropylbenzene	12.464	105	6803	2.797	ug/l	96
74) N-amyl acetate	12.251	43	11360	16.279	ug/l #	52
76) 1,2,3-Trichloropropane	12.873	75	1025	2.170	ug/l #	1
78) n-propylbenzene	12.806	91	22098	7.379	ug/l	98
80) 1,3,5-Trimethylbenzene	12.940	105	41221	19.962	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.617	75	16353	89.625	ug/l #	11
83) tert-Butylbenzene	13.244	119	13032	7.604	ug/l #	69
84) 1,2,4-Trimethylbenzene	13.244	105	103870	49.414	ug/l	99
85) sec-Butylbenzene	13.379	105	14507	5.599	ug/l	79
86) p-Isopropyltoluene	13.494	119	8571	3.968	ug/l	94
89) n-Butylbenzene	13.818	91	14958	7.128	ug/l #	75
90) Hexachloroethane	14.037	117	2301	5.825	ug/l	63
95) Naphthalene	15.366	128	8391	5.467	ug/l #	86
96) 1,2,3-Trichlorobenzene	15.567	180	668	1.172	ug/l #	80

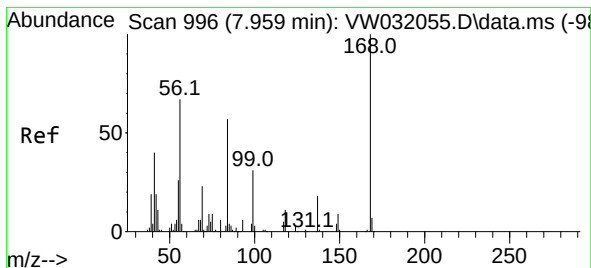
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Tue Aug 12 04:04:48 2025
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.959 min Scan# 996

Delta R.T. -0.000 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

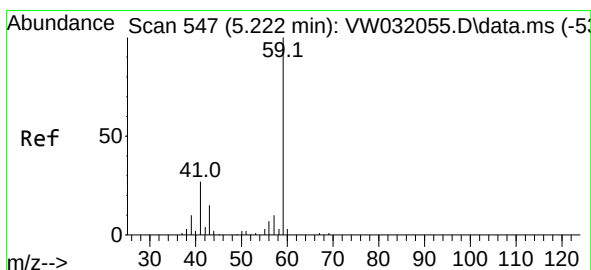
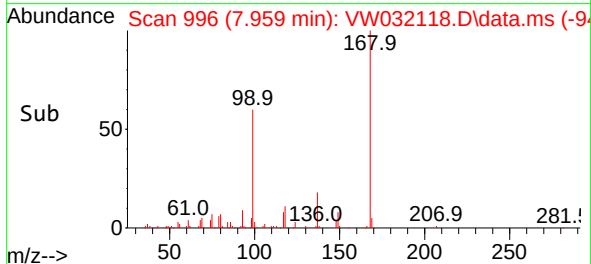
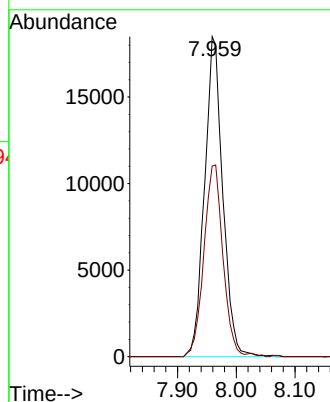
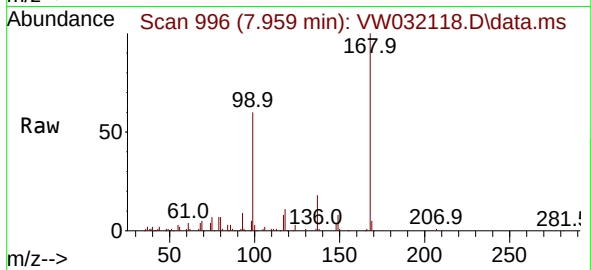
TR-04-08212025

Tgt Ion:168 Resp: 39834

Ion Ratio Lower Upper

168 100

99 59.6 56.0 84.0



#11

Tert butyl alcohol

Concen: 2.037 ug/l

RT: 5.197 min Scan# 543

Delta R.T. -0.025 min

Lab File: VW032118.D

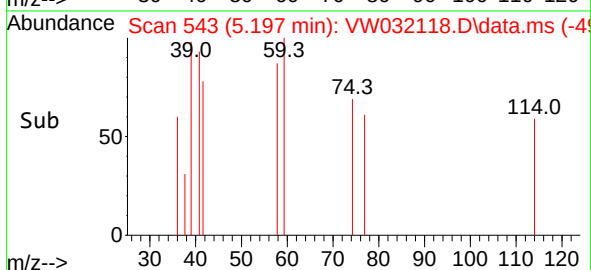
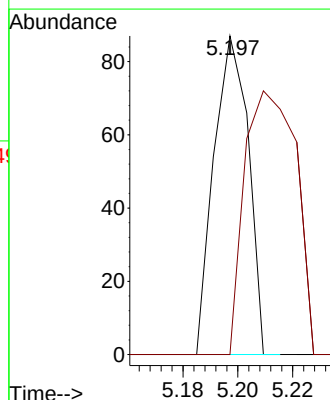
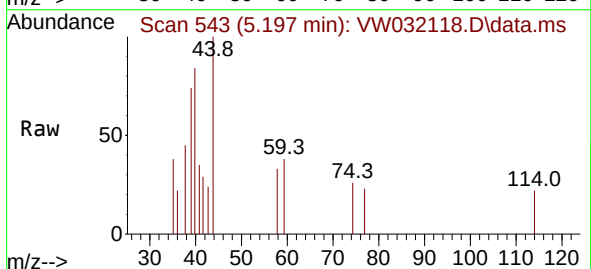
Acq: 22 Aug 2025 17:56

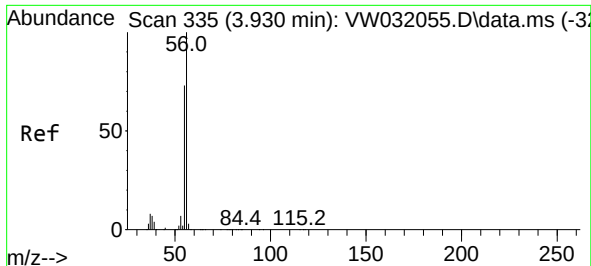
Tgt Ion: 59 Resp: 76

Ion Ratio Lower Upper

59 100

57 123.7 8.7 13.1#

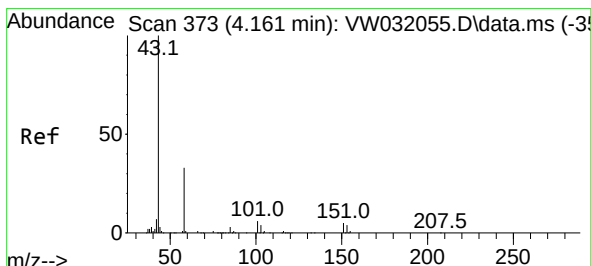
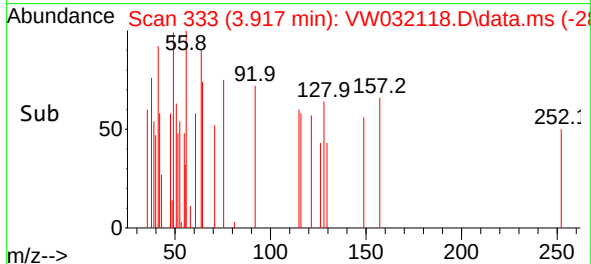
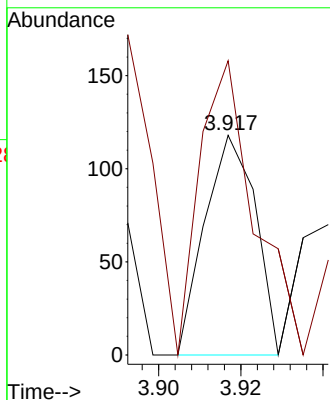
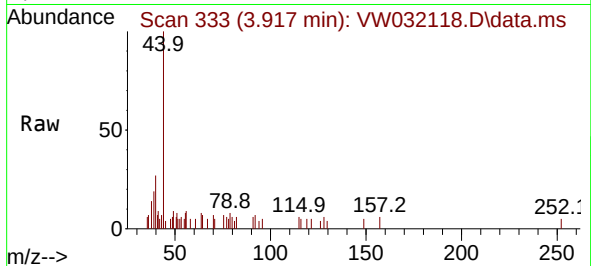




#13
Acrolein
Concen: 1.699 ug/l
RT: 3.917 min Scan# 311
Delta R.T. -0.013 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

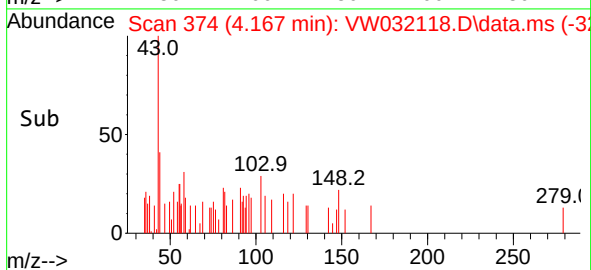
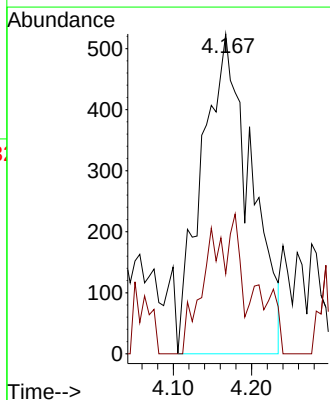
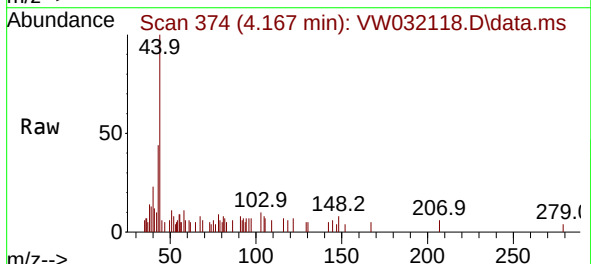
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

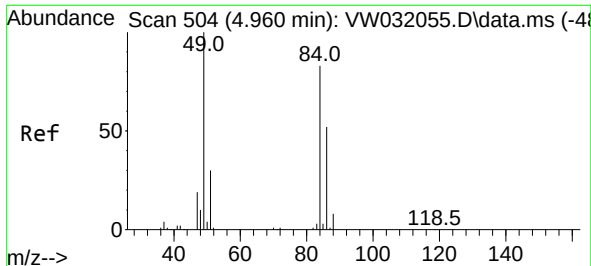
Tgt Ion: 56 Resp: 101
Ion Ratio Lower Upper
56 100
55 144.6 55.4 83.2#



#16
Acetone
Concen: 17.003 ug/l
RT: 4.167 min Scan# 374
Delta R.T. 0.006 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 43 Resp: 2268
Ion Ratio Lower Upper
43 100
58 25.0 26.6 39.8#

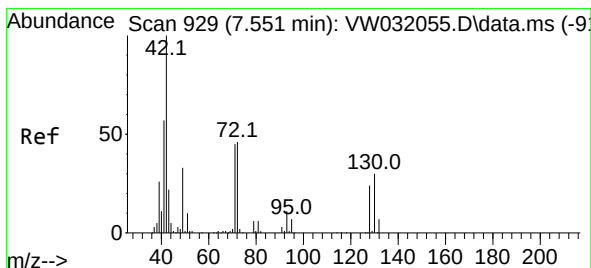
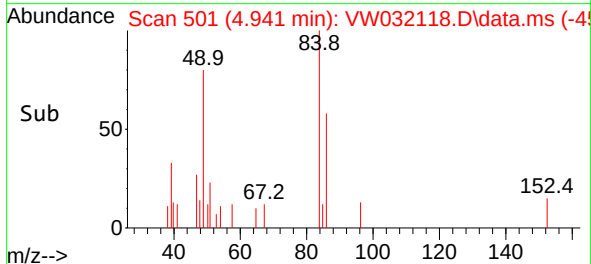
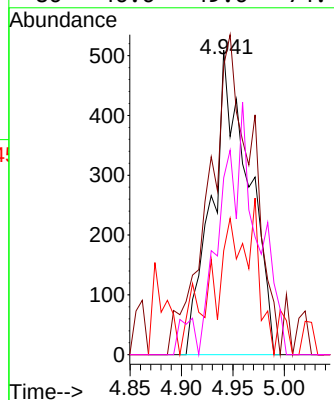
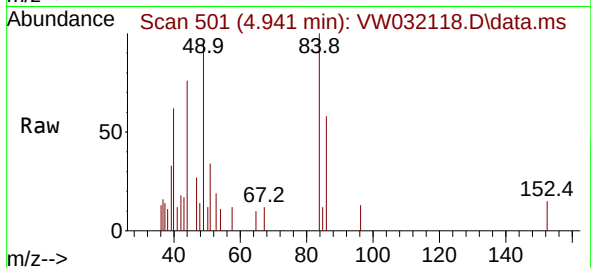




#20
Methylene Chloride
Concen: 2.048 ug/l
RT: 4.941 min Scan# 504
Delta R.T. -0.019 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

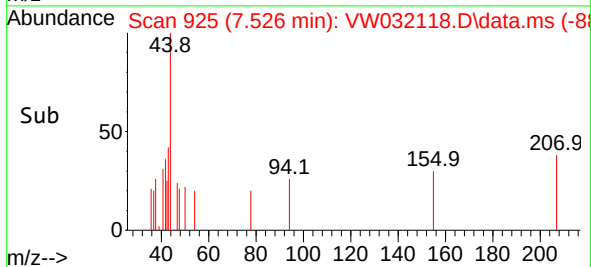
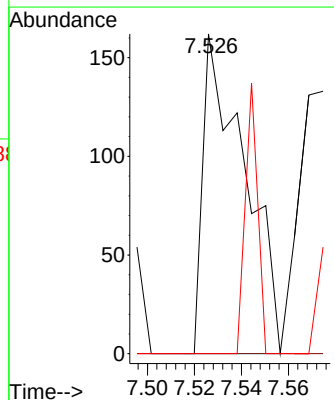
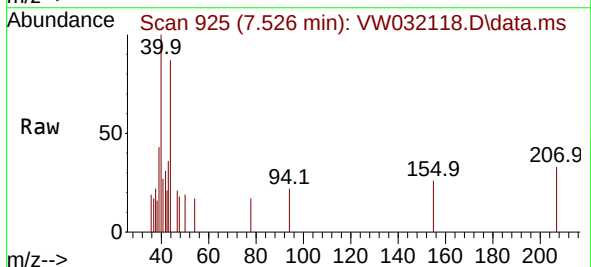
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

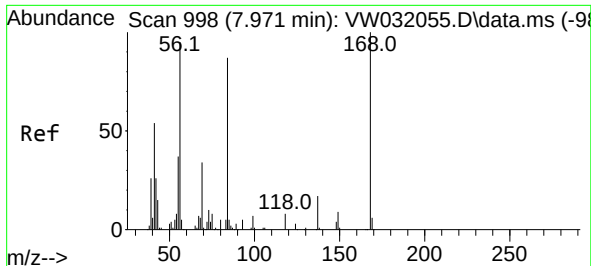
Tgt Ion: 84	Resp: 1263
Ion Ratio	Lower Upper
84 100	
49 94.9	95.9 143.9#
51 34.2	28.6 43.0
86 46.6	49.6 74.4#



#29
Tetrahydrofuran
Concen: 1.592 ug/l
RT: 7.526 min Scan# 925
Delta R.T. -0.025 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 42	Resp: 199
Ion Ratio	Lower Upper
42 100	
72 0.0	36.6 55.0#
71 25.1	34.7 52.1#

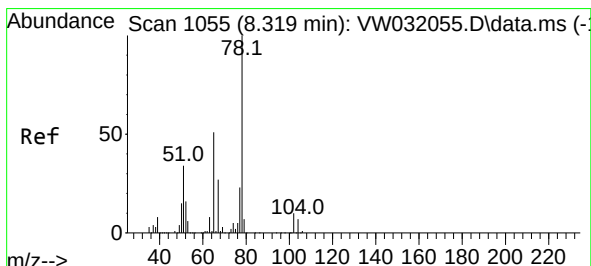
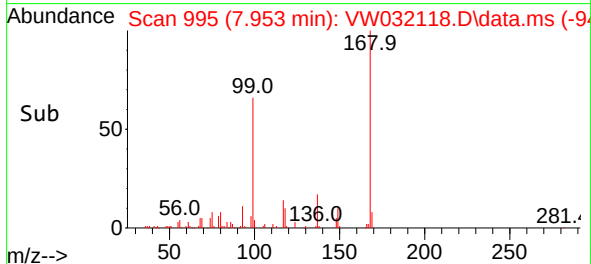
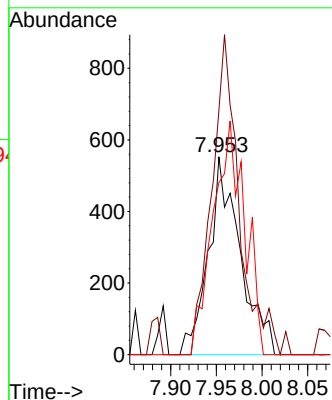
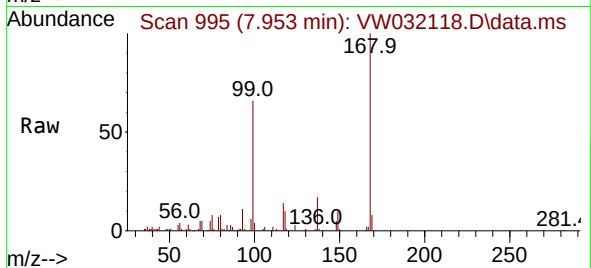




#31
Cyclohexane
Concen: 1.630 ug/l
RT: 7.953 min Scan# 998
Delta R.T. -0.019 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

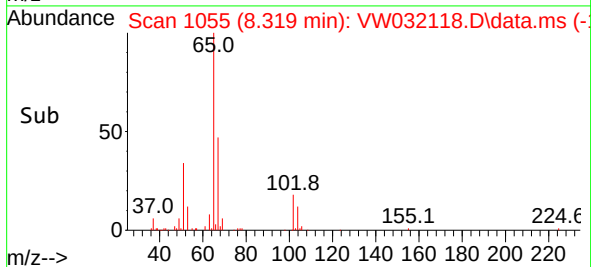
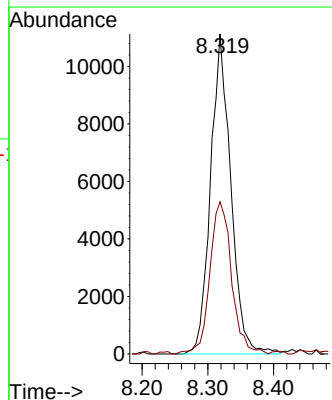
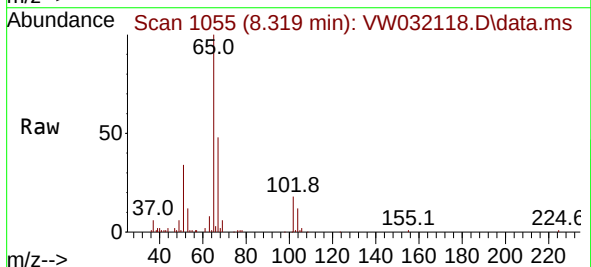
Instrument :
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TR-04-08212025

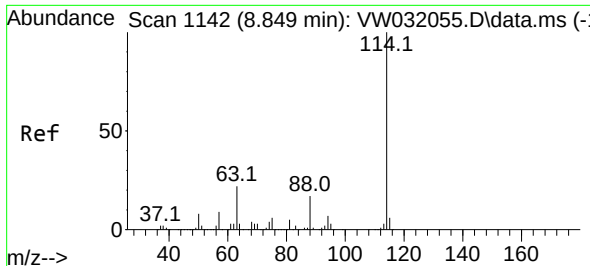
Tgt Ion: 56 Resp: 1338
Ion Ratio Lower Upper
56 100
69 123.5 28.6 42.8#
84 87.0 73.0 109.4



#33
1,2-Dichloroethane-d4
Concen: 41.469 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 65 Resp: 23891
Ion Ratio Lower Upper
65 100
67 50.8 0.0 102.4

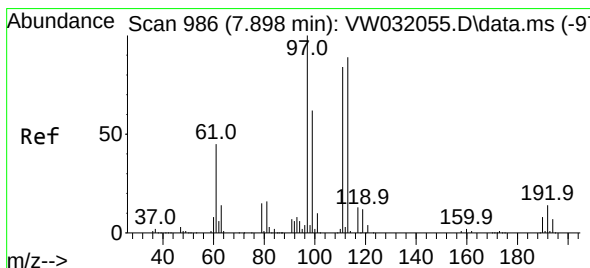
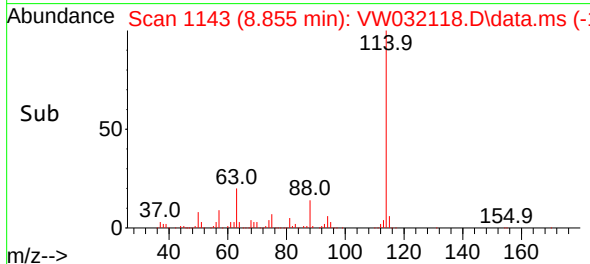
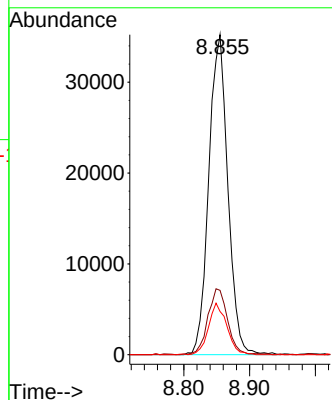
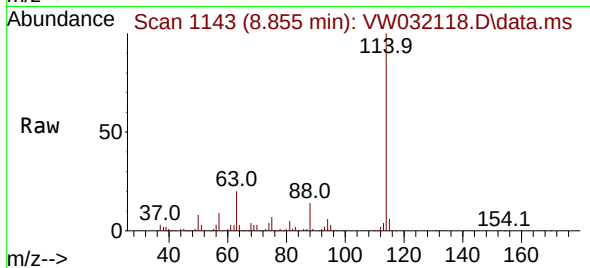




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.855 min Scan# 1142
Delta R.T. 0.006 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

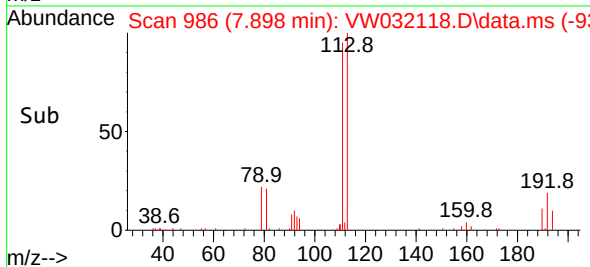
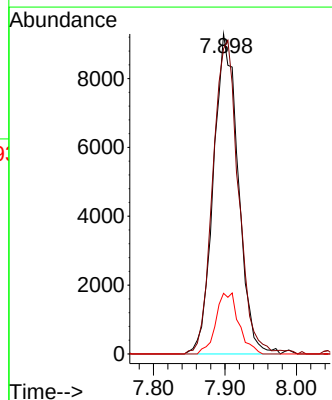
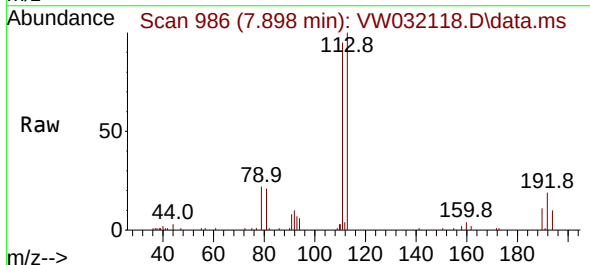
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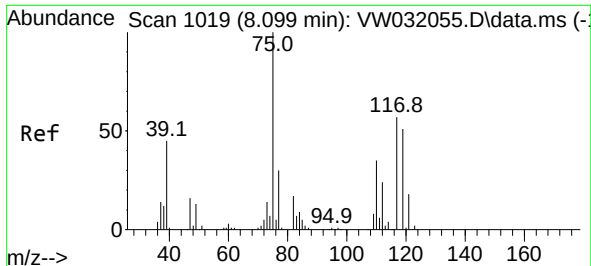
Tgt Ion:114 Resp: 71007
Ion Ratio Lower Upper
114 100
63 20.1 0.0 43.0
88 13.5 0.0 33.8



#35
Dibromofluoromethane
Concen: 48.721 ug/l
RT: 7.898 min Scan# 986
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion:113 Resp: 22350
Ion Ratio Lower Upper
113 100
111 101.1 80.1 120.1
192 17.6 13.1 19.7





#36

1,1-Dichloropropene

Concen: 5.454 ug/l

RT: 7.965 min Scan# 997

Delta R.T. -0.135 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

TR-04-08212025

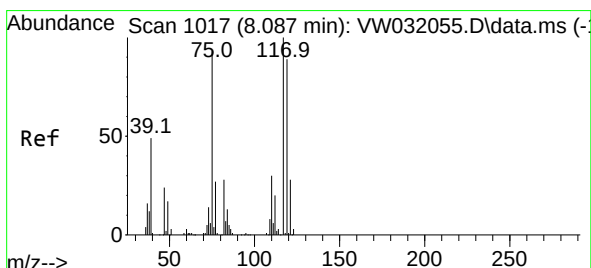
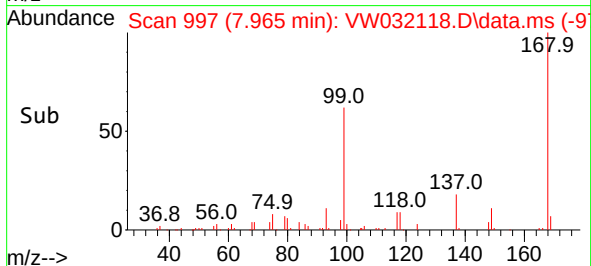
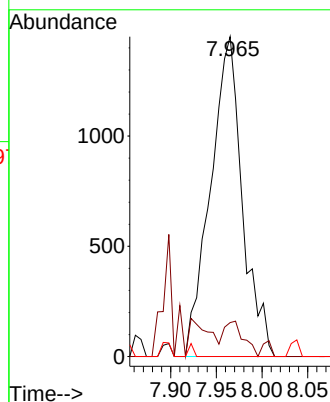
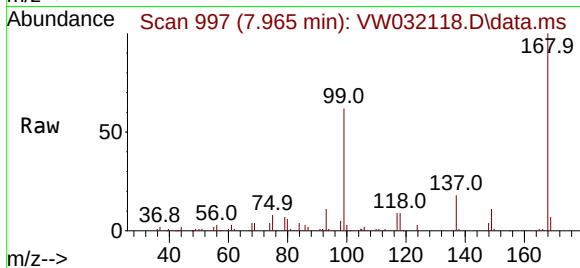
Tgt Ion: 75 Resp: 3527

Ion Ratio Lower Upper

75 100

110 6.8 17.4 52.2#

77 0.0 24.7 37.1#



#38

Carbon Tetrachloride

Concen: 6.836 ug/l

RT: 7.953 min Scan# 995

Delta R.T. -0.135 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

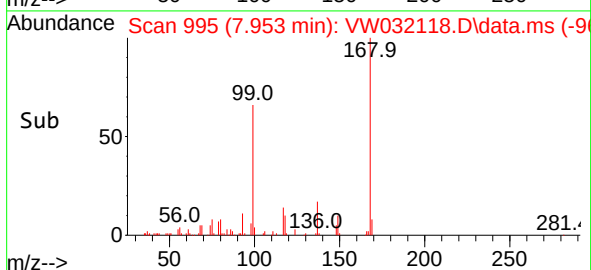
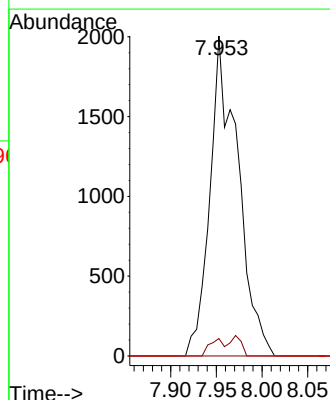
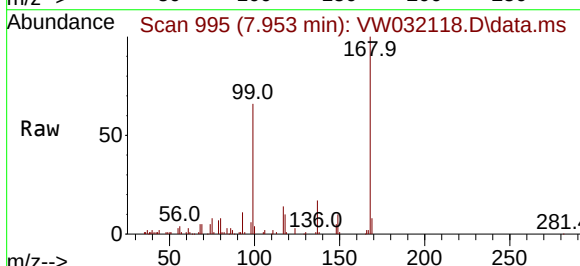
Tgt Ion: 117 Resp: 4266

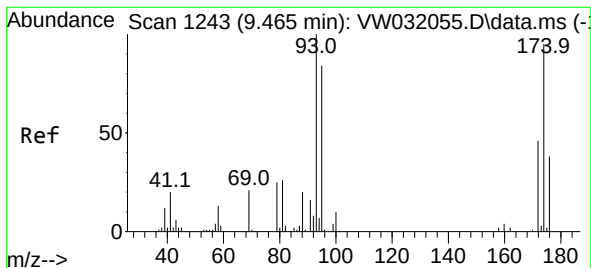
Ion Ratio Lower Upper

117 100

119 5.4 71.4 107.2#

121 0.0 22.3 33.5#





#49

1,4-Dioxane

Concen: 20.481 ug/l

RT: 9.465 min Scan# 11

Delta R.T. -0.000 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

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MSVOA_W

ClientSampleId :

TR-04-08212025

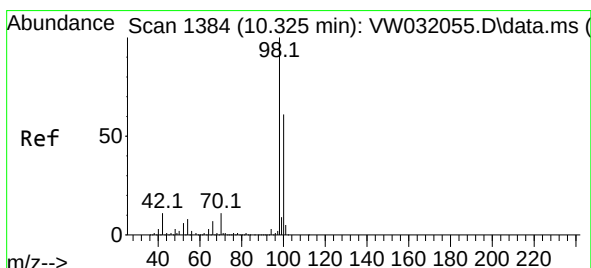
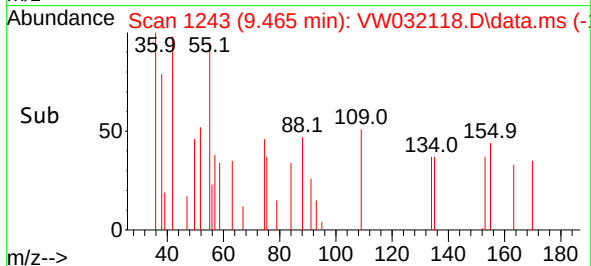
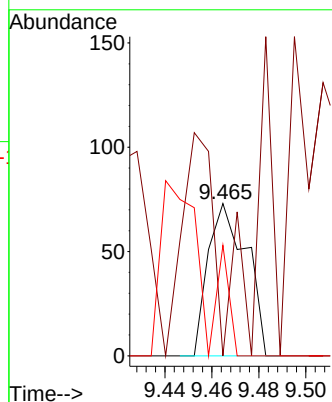
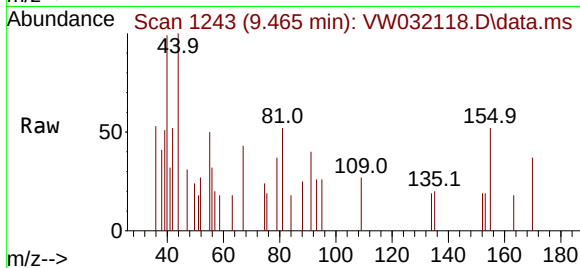
Tgt Ion: 88 Resp: 83

Ion Ratio Lower Upper

88 100

43 97.6 20.6 30.8#

58 0.0 60.4 90.6#



#50

Toluene-d8

Concen: 44.071 ug/l

RT: 10.330 min Scan# 1385

Delta R.T. 0.006 min

Lab File: VW032118.D

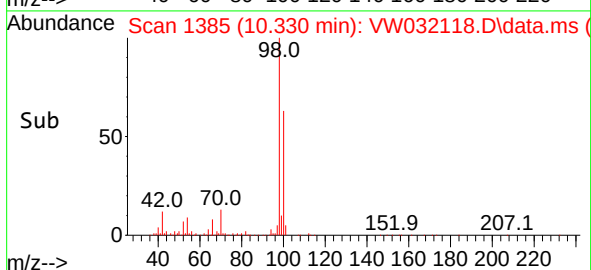
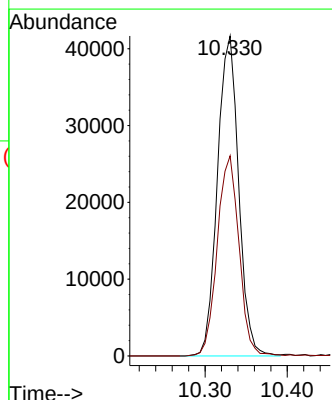
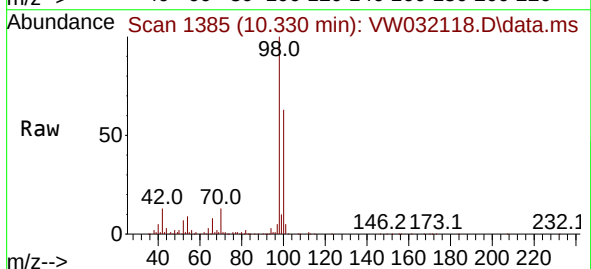
Acq: 22 Aug 2025 17:56

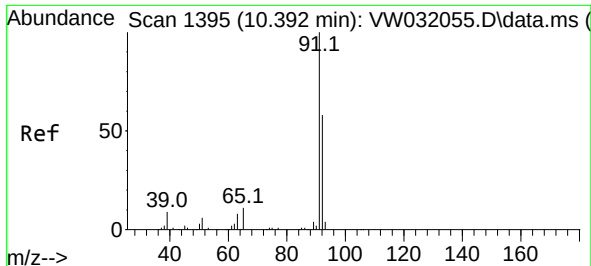
Tgt Ion: 98 Resp: 74776

Ion Ratio Lower Upper

98 100

100 64.0 51.1 76.7

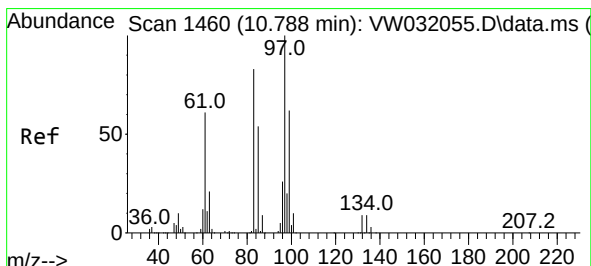
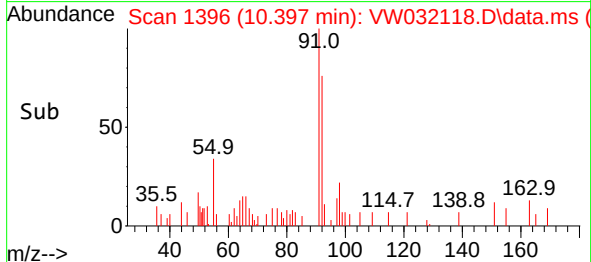
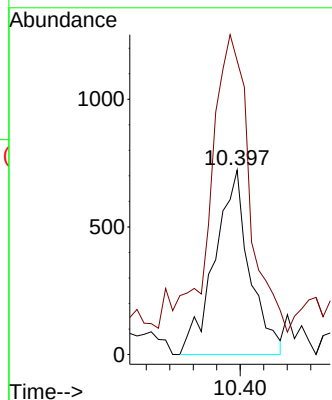
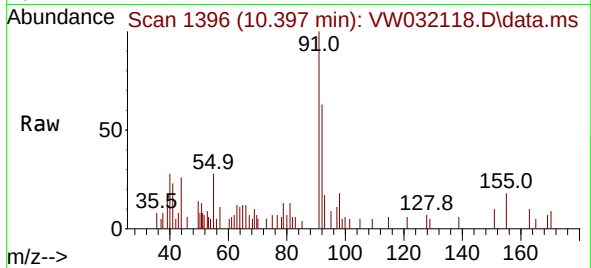




#52
Toluene
Concen: 1.173 ug/l
RT: 10.397 min Scan# 1485
Delta R.T. 0.006 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

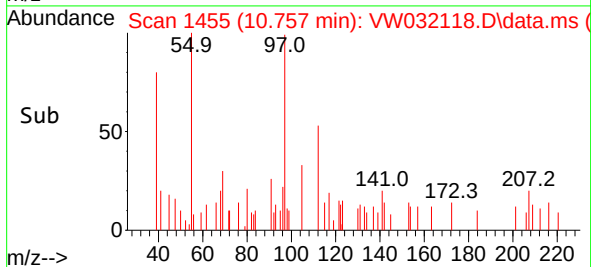
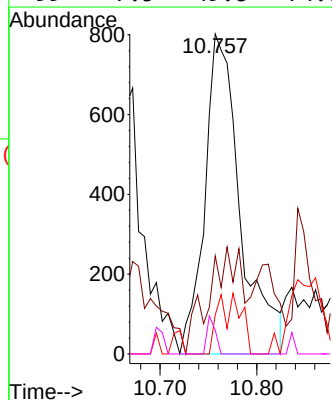
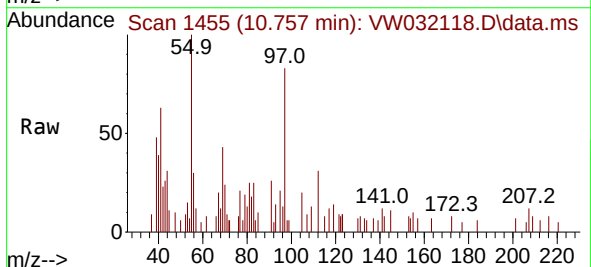
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

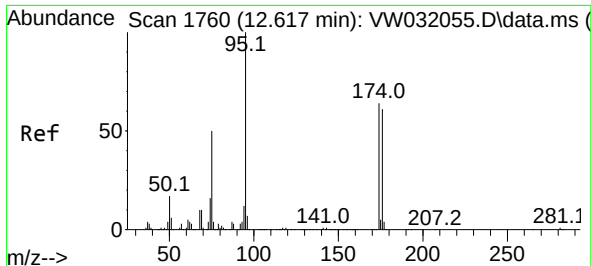
Tgt Ion: 92 Resp: 1485
Ion Ratio Lower Upper
92 100
91 182.4 136.3 204.5



#55
1,1,2-Trichloroethane
Concen: 4.908 ug/l
RT: 10.757 min Scan# 1455
Delta R.T. -0.031 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 97 Resp: 2044
Ion Ratio Lower Upper
97 100
83 22.7 66.4 99.6#
85 12.2 43.1 64.7#
99 7.5 49.8 74.6#

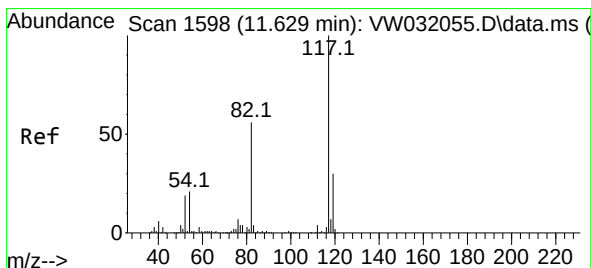
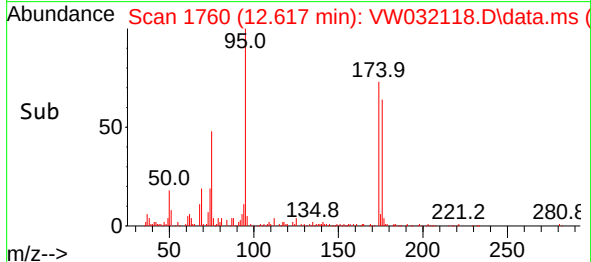
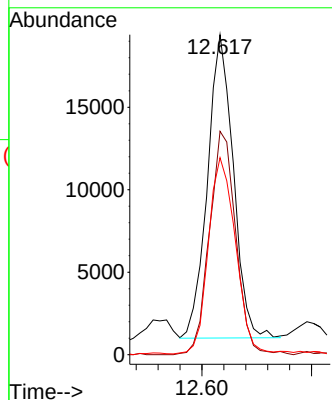
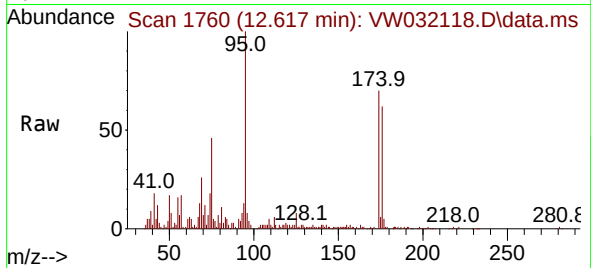




#62
4-Bromofluorobenzene
Concen: 48.103 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

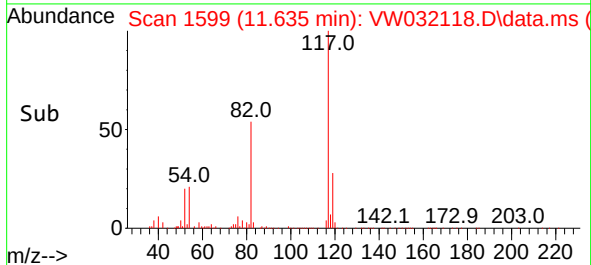
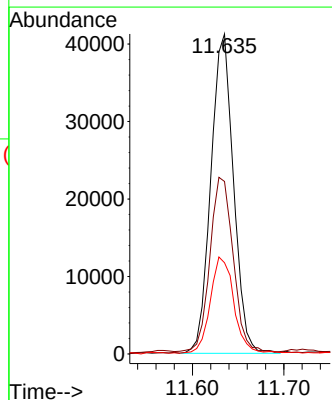
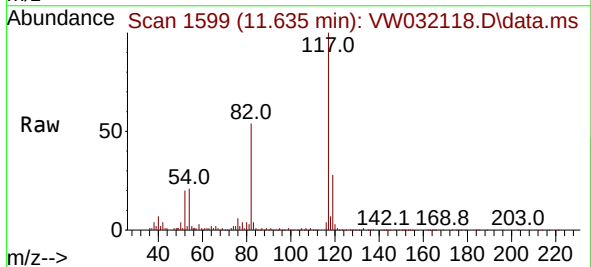
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

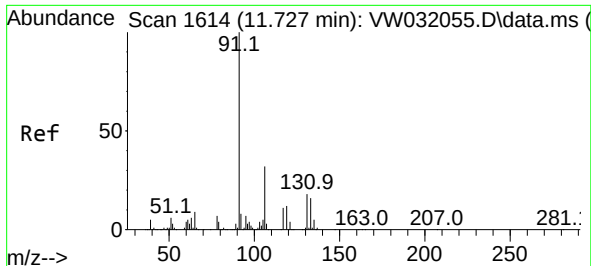
Tgt Ion: 95 Resp: 30077
Ion Ratio Lower Upper
95 100
174 75.1 0.0 129.0
176 68.1 0.0 124.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 1599
Delta R.T. 0.006 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion:117 Resp: 70874
Ion Ratio Lower Upper
117 100
82 53.2 45.0 67.4
119 28.3 24.2 36.4





#67

Ethyl Benzene

Concen: 3.862 ug/l

RT: 11.733 min Scan# 1

Delta R.T. 0.006 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

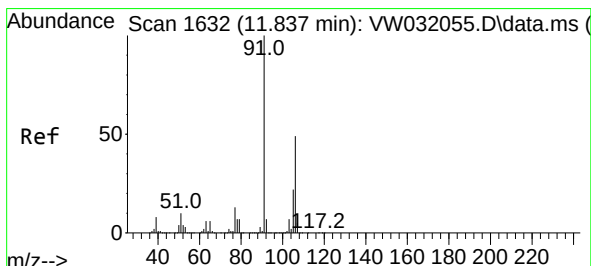
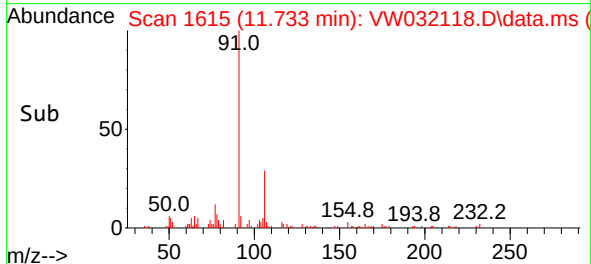
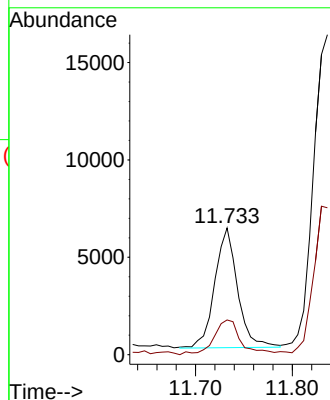
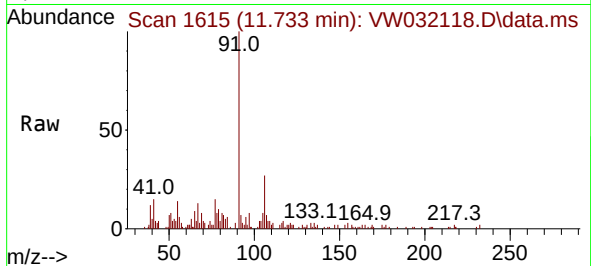
TR-04-08212025

Tgt Ion: 91 Resp: 10091

Ion Ratio Lower Upper

91 100

106 29.1 25.4 38.0



#68

m/p-Xylenes

Concen: 15.494 ug/l

RT: 11.842 min Scan# 1633

Delta R.T. 0.006 min

Lab File: VW032118.D

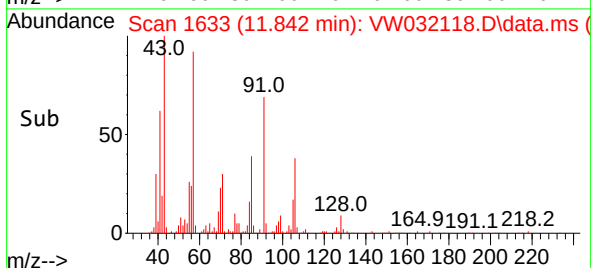
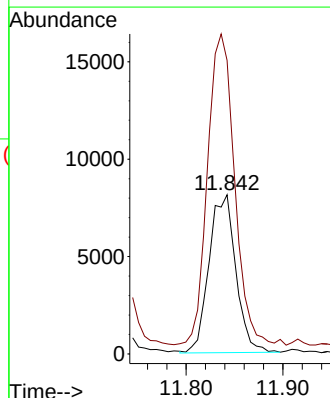
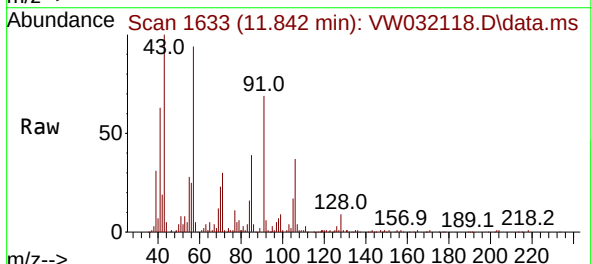
Acq: 22 Aug 2025 17:56

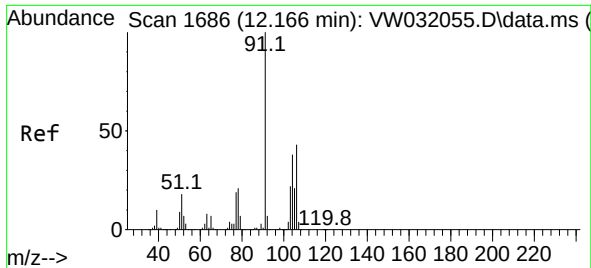
Tgt Ion: 106 Resp: 15623

Ion Ratio Lower Upper

106 100

91 198.1 162.2 243.2

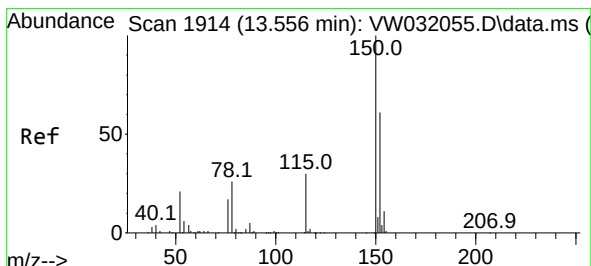
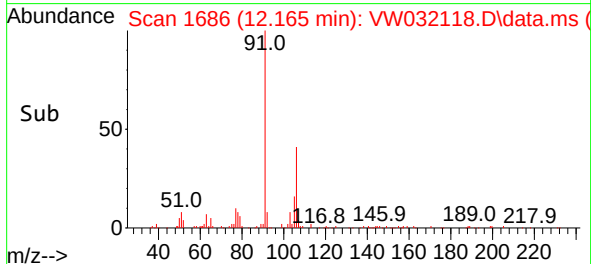
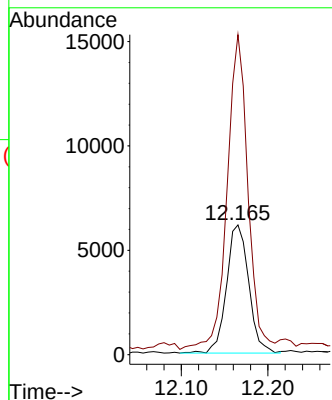
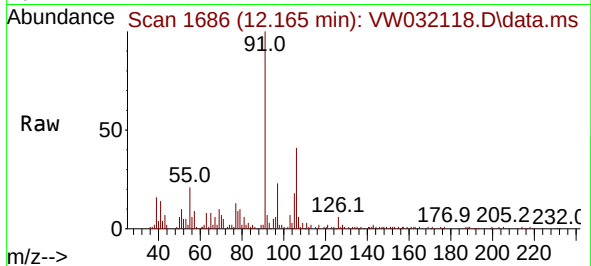




#69
o-Xylene
Concen: 11.711 ug/l
RT: 12.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

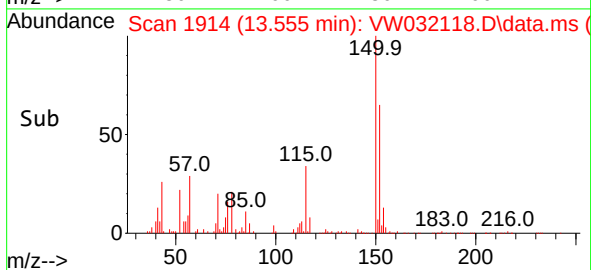
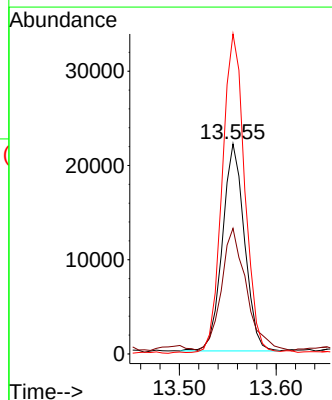
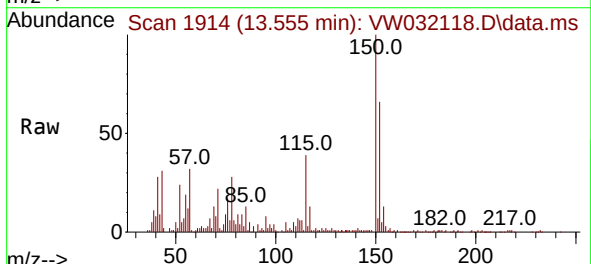
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

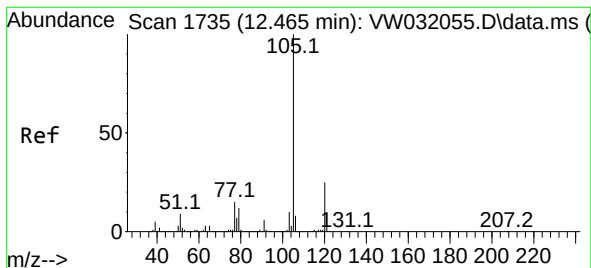
Tgt Ion:106 Resp: 10914
Ion Ratio Lower Upper
106 100
91 229.5 110.8 332.3



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.555 min Scan# 1914
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion:152 Resp: 34804
Ion Ratio Lower Upper
152 100
115 67.0 32.6 97.8
150 158.3 0.0 359.4





#73

Isopropylbenzene

Concen: 2.797 ug/l

RT: 12.464 min Scan# 1

Delta R.T. -0.000 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

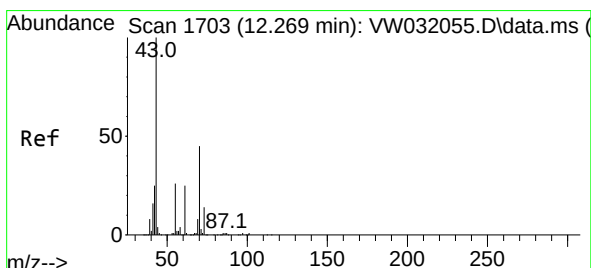
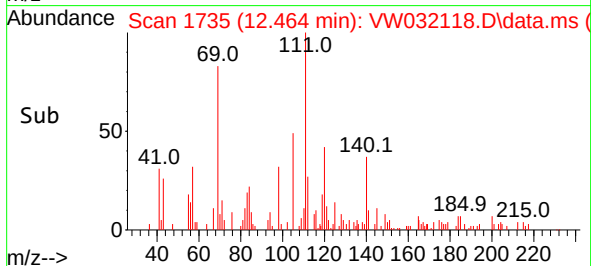
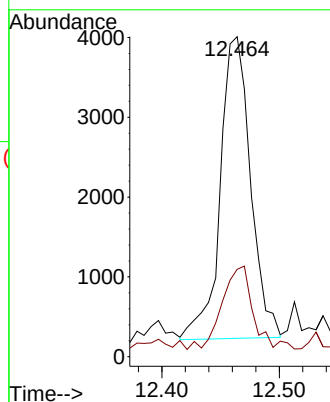
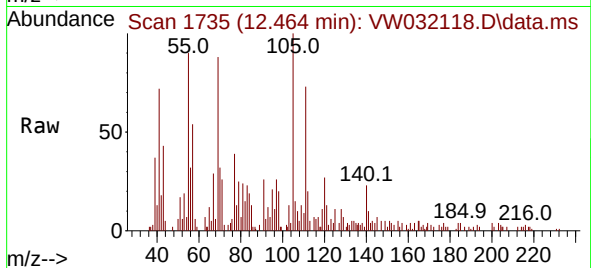
TR-04-08212025

Tgt Ion:105 Resp: 6803

Ion Ratio Lower Upper

105 100

120 27.8 12.8 38.4



#74

N-ethyl acetate

Concen: 16.279 ug/l

RT: 12.251 min Scan# 1700

Delta R.T. -0.019 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Tgt Ion: 43 Resp: 11360

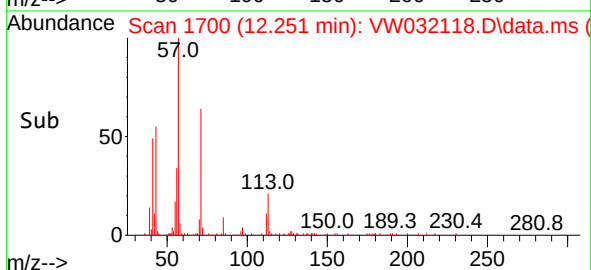
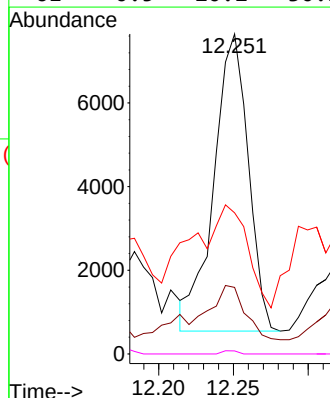
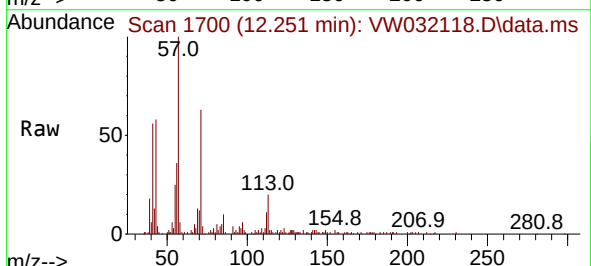
Ion Ratio Lower Upper

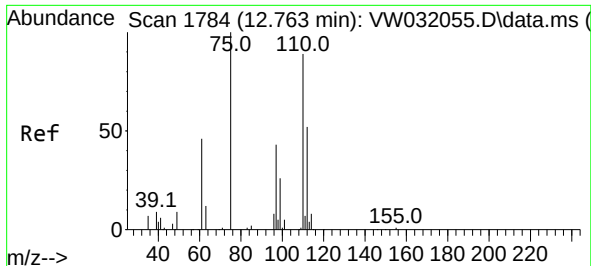
43 100

70 18.8 37.0 55.4#

55 56.6 21.1 31.7#

61 0.5 20.2 30.2#

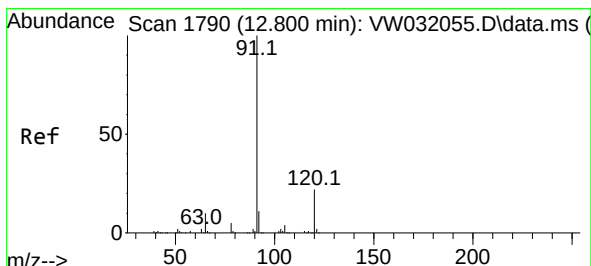
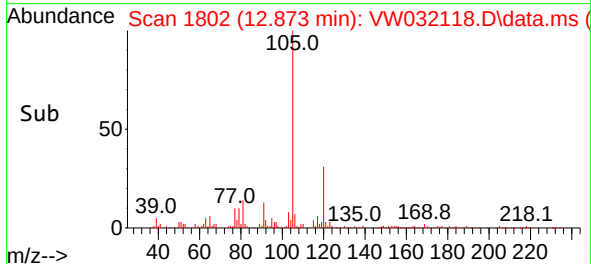
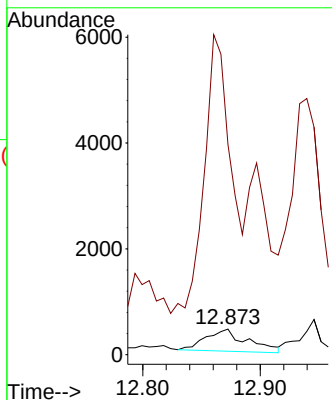
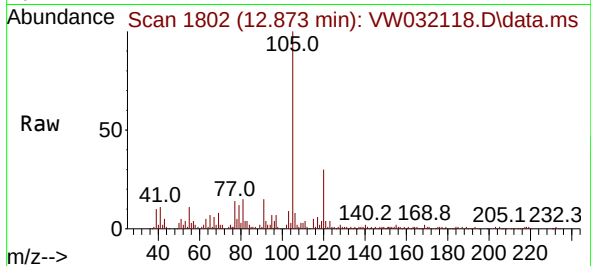




#76
1,2,3-Trichloropropane
Concen: 2.170 ug/l
RT: 12.873 min Scan# 1784
Delta R.T. 0.109 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

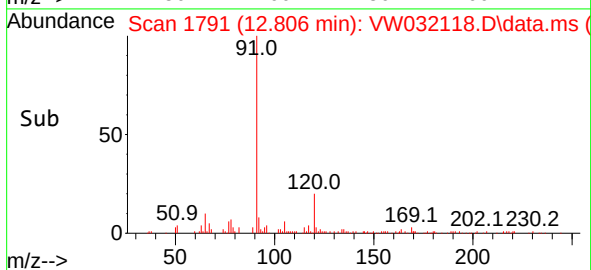
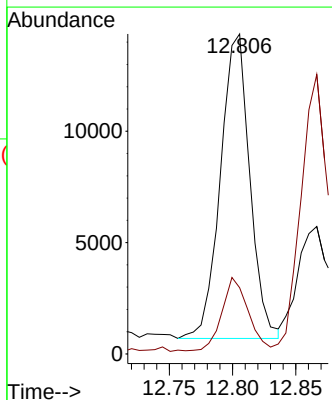
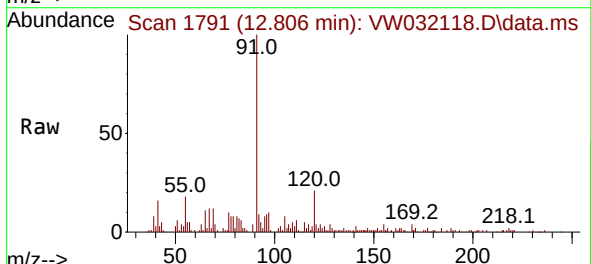
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

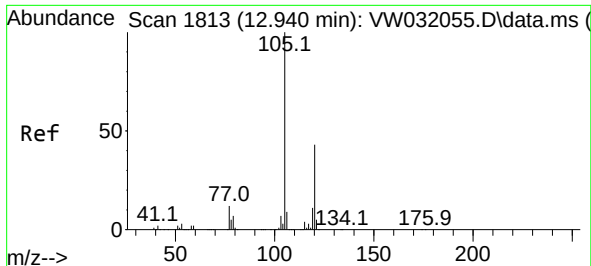
Tgt Ion: 75 Resp: 1025
Ion Ratio Lower Upper
75 100
77 839.6 123.5 370.5#



#78
n-propylbenzene
Concen: 7.379 ug/l
RT: 12.806 min Scan# 1791
Delta R.T. 0.006 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 91 Resp: 22098
Ion Ratio Lower Upper
91 100
120 21.3 11.1 33.3

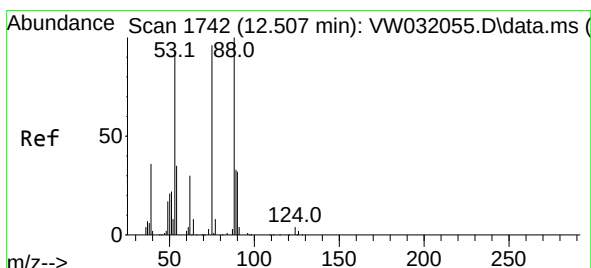
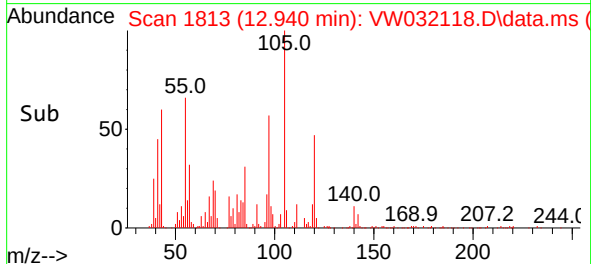
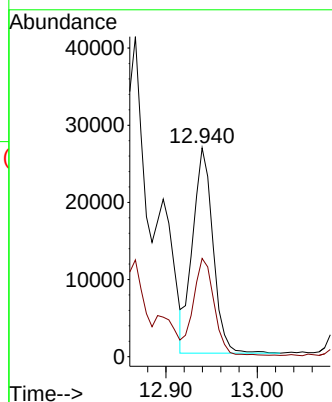
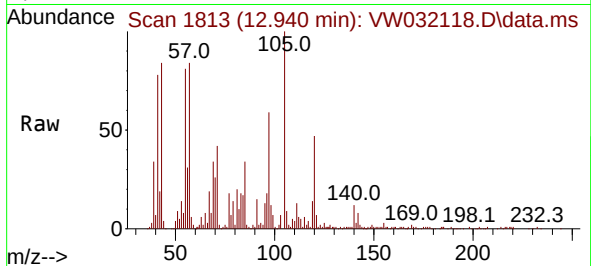




#80
1,3,5-Trimethylbenzene
Concen: 19.962 ug/l
RT: 12.940 min Scan# 11
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

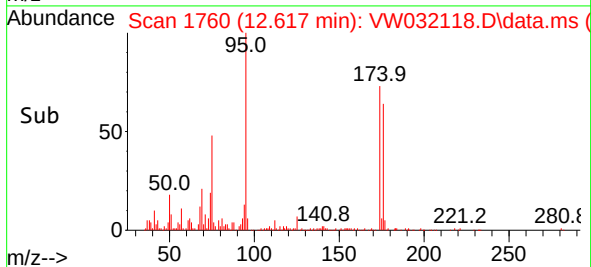
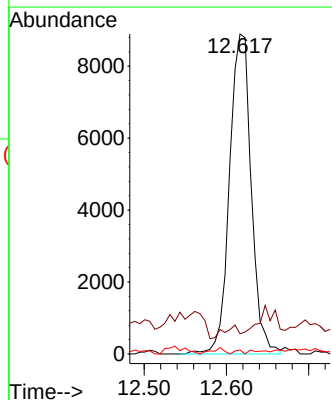
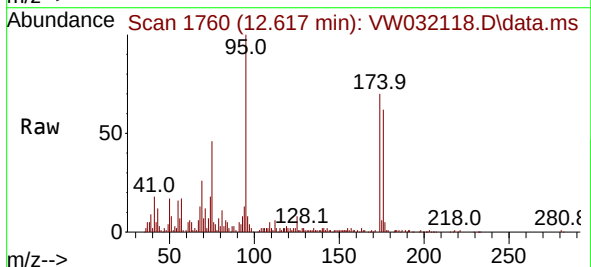
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

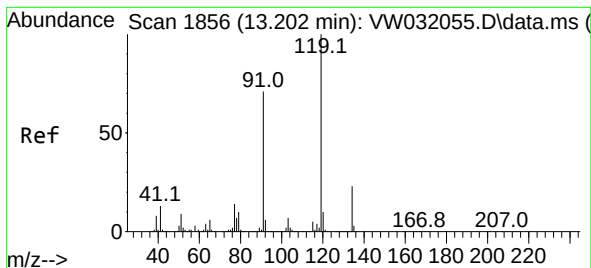
Tgt Ion:105 Resp: 41221
Ion Ratio Lower Upper
105 100
120 48.4 23.4 70.0



#81
trans-1,4-Dichloro-2-butene
Concen: 89.625 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.109 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion: 75 Resp: 16353
Ion Ratio Lower Upper
75 100
53 2.3 81.0 121.6#
89 0.4 37.3 55.9#





#83

tert-Butylbenzene

Concen: 7.604 ug/l

RT: 13.244 min Scan# 1863

Delta R.T. 0.042 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

TR-04-08212025

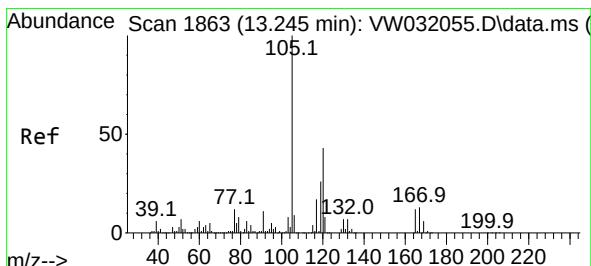
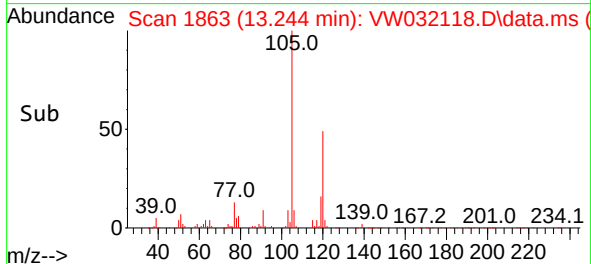
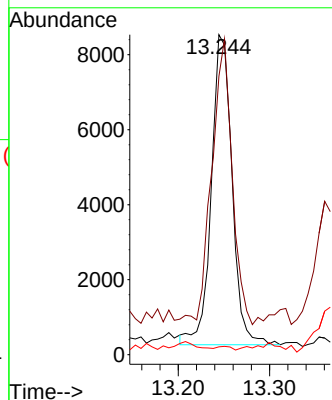
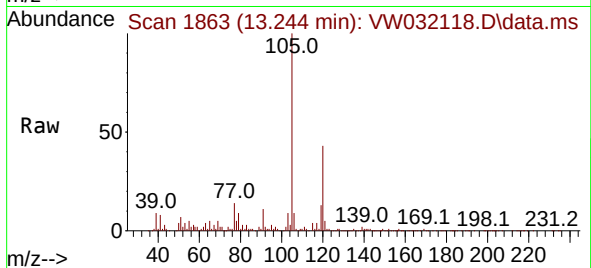
Tgt Ion:119 Resp: 13032

Ion Ratio Lower Upper

119 100

91 90.9 35.3 105.9

134 0.0 12.1 36.3#



#84

1,2,4-Trimethylbenzene

Concen: 49.414 ug/l

RT: 13.244 min Scan# 1863

Delta R.T. -0.000 min

Lab File: VW032118.D

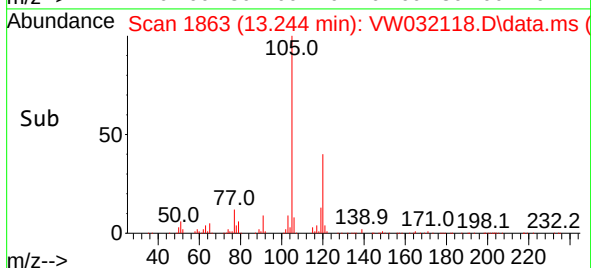
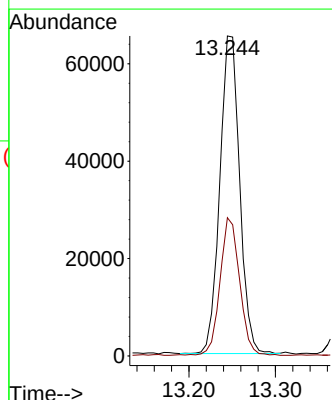
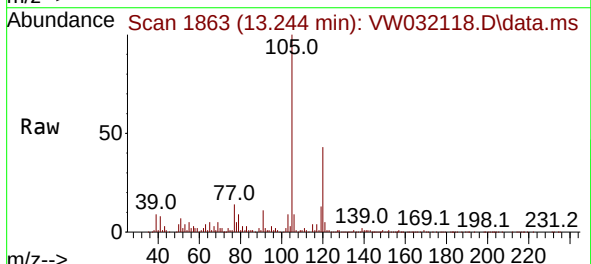
Acq: 22 Aug 2025 17:56

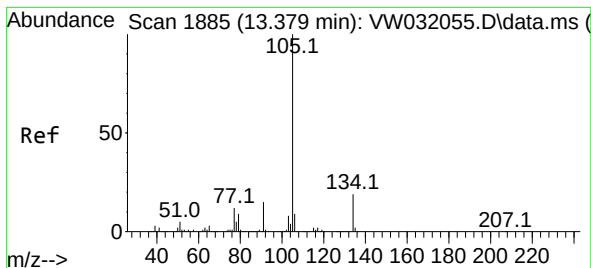
Tgt Ion:105 Resp: 103870

Ion Ratio Lower Upper

105 100

120 42.7 21.6 64.8

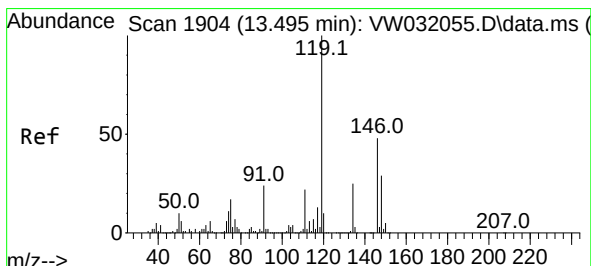
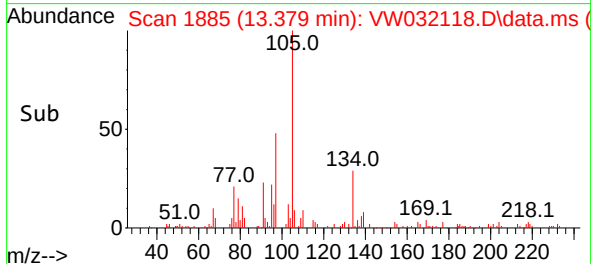
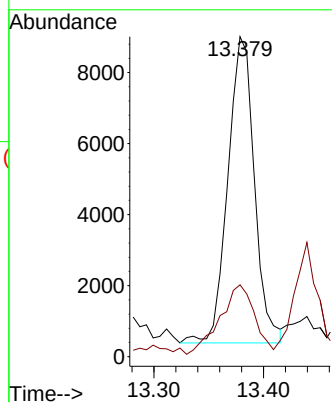
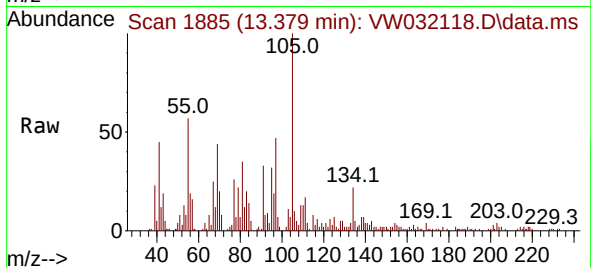




#85
sec-Butylbenzene
Concen: 5.599 ug/l
RT: 13.379 min Scan# 11
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

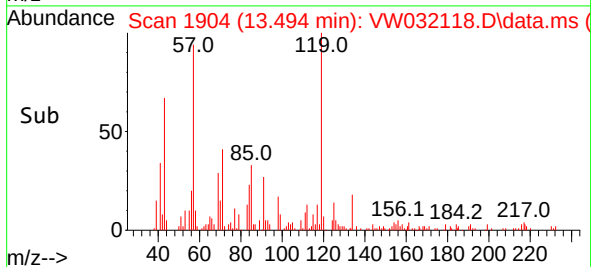
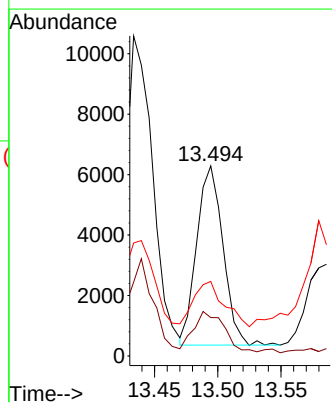
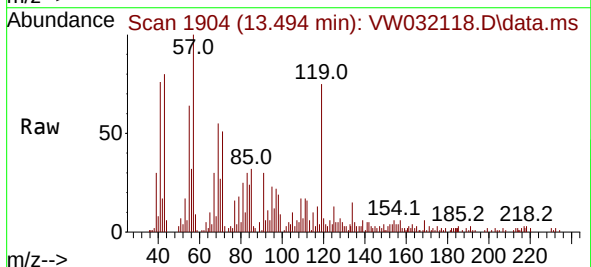
Instrument :
MSVOA_W
ClientSampleId :
TR-04-08212025

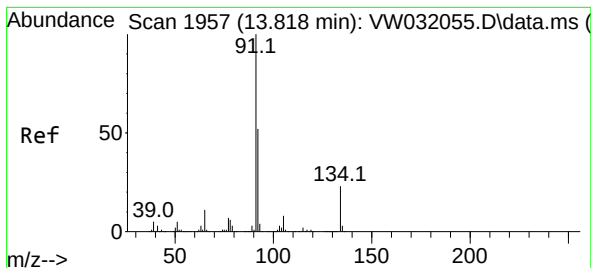
Tgt Ion:105 Resp: 14507
Ion Ratio Lower Upper
105 100
134 29.5 9.9 29.7



#86
p-Isopropyltoluene
Concen: 3.968 ug/l
RT: 13.494 min Scan# 1904
Delta R.T. -0.000 min
Lab File: VW032118.D
Acq: 22 Aug 2025 17:56

Tgt Ion:119 Resp: 8571
Ion Ratio Lower Upper
119 100
134 26.1 12.4 37.0
91 28.9 12.1 36.3





#89

n-Butylbenzene

Concen: 7.128 ug/l

RT: 13.818 min Scan# 1957

Delta R.T. -0.000 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

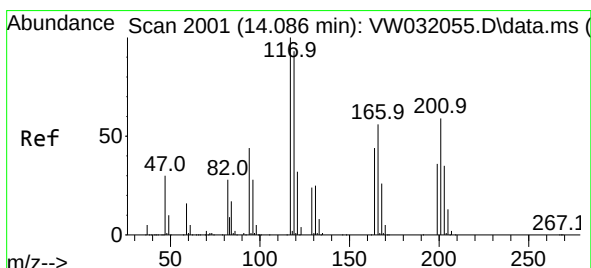
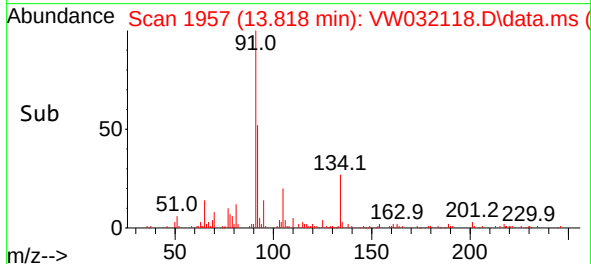
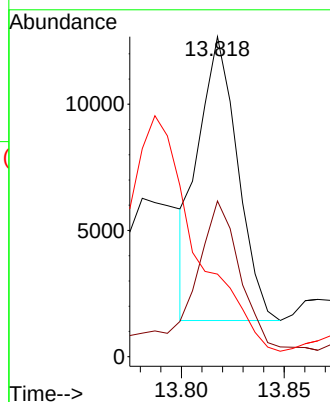
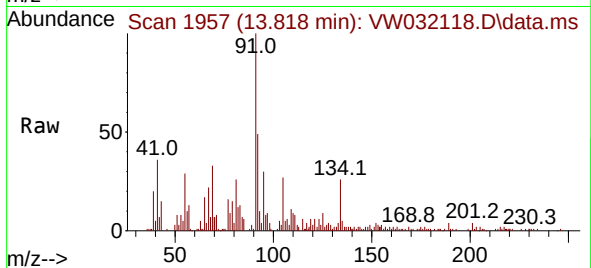
Instrument :

MSVOA_W

ClientSampleId :

TR-04-08212025

Tgt Ion:	91	Resp:	14958
Ion	Ratio	Lower	Upper
91	100		
92	63.1	26.7	80.1
134	0.0	12.0	36.1



#90

Hexachloroethane

Concen: 5.825 ug/l

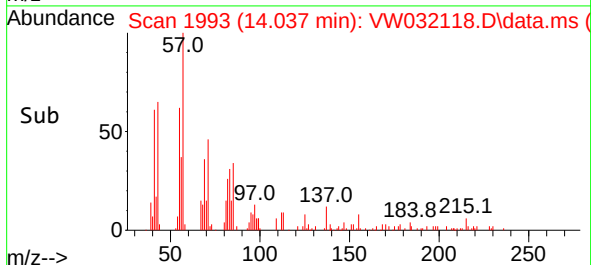
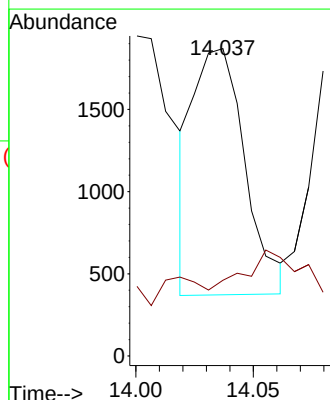
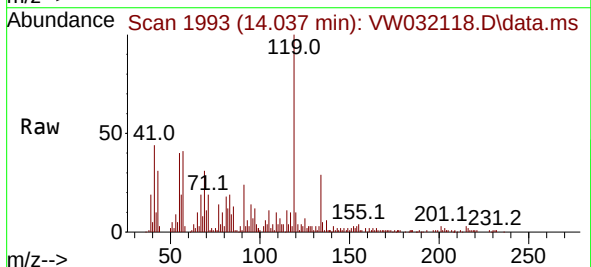
RT: 14.037 min Scan# 1993

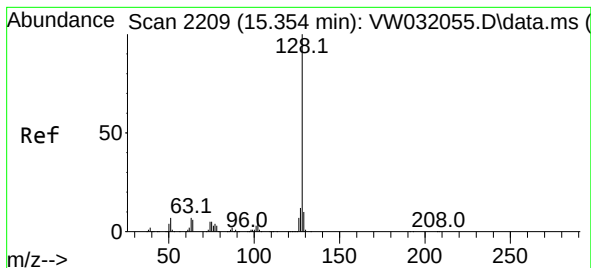
Delta R.T. -0.049 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Tgt Ion:	117	Resp:	2301
Ion	Ratio	Lower	Upper
117	100		
201	33.0	30.9	92.5





#95

Naphthalene

Concen: 5.467 ug/l

RT: 15.366 min Scan# 21

Delta R.T. 0.012 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Instrument :

MSVOA_W

ClientSampleId :

TR-04-08212025

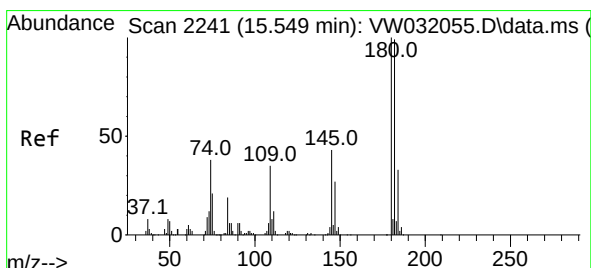
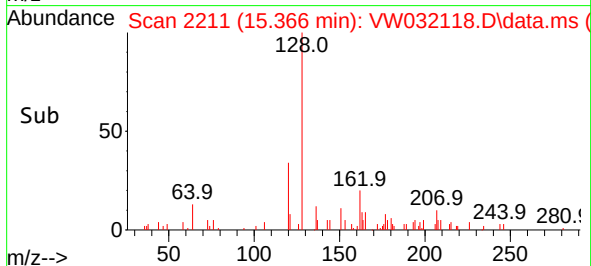
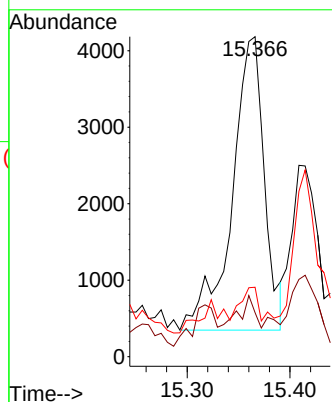
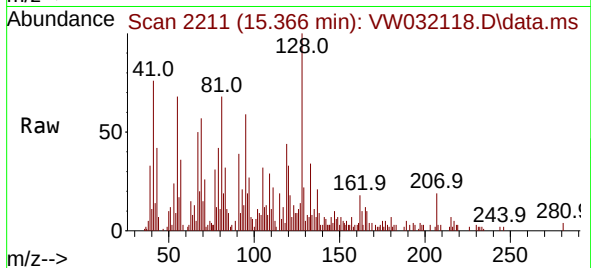
Tgt Ion:128 Resp: 8391

Ion Ratio Lower Upper

128 100

127 6.8 10.5 15.7#

129 6.3 8.2 12.4#



#96

1,2,3-Trichlorobenzene

Concen: 1.172 ug/l

RT: 15.567 min Scan# 2244

Delta R.T. 0.018 min

Lab File: VW032118.D

Acq: 22 Aug 2025 17:56

Tgt Ion:180 Resp: 668

Ion Ratio Lower Upper

180 100

182 90.3 46.0 138.0

145 0.0 19.2 57.6#

