

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY120225\
 Data File : VY023856.D
 Acq On : 02 Dec 2025 13:18
 Operator : SY/MD
 Sample : Q3741-05RE
 Misc : 5.85g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :

Quant Time: Dec 03 01:03:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y112625S.M
 Quant Title : SW846 8260
 QLast Update : Thu Nov 27 01:14:36 2025
 Response via : Initial Calibration

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

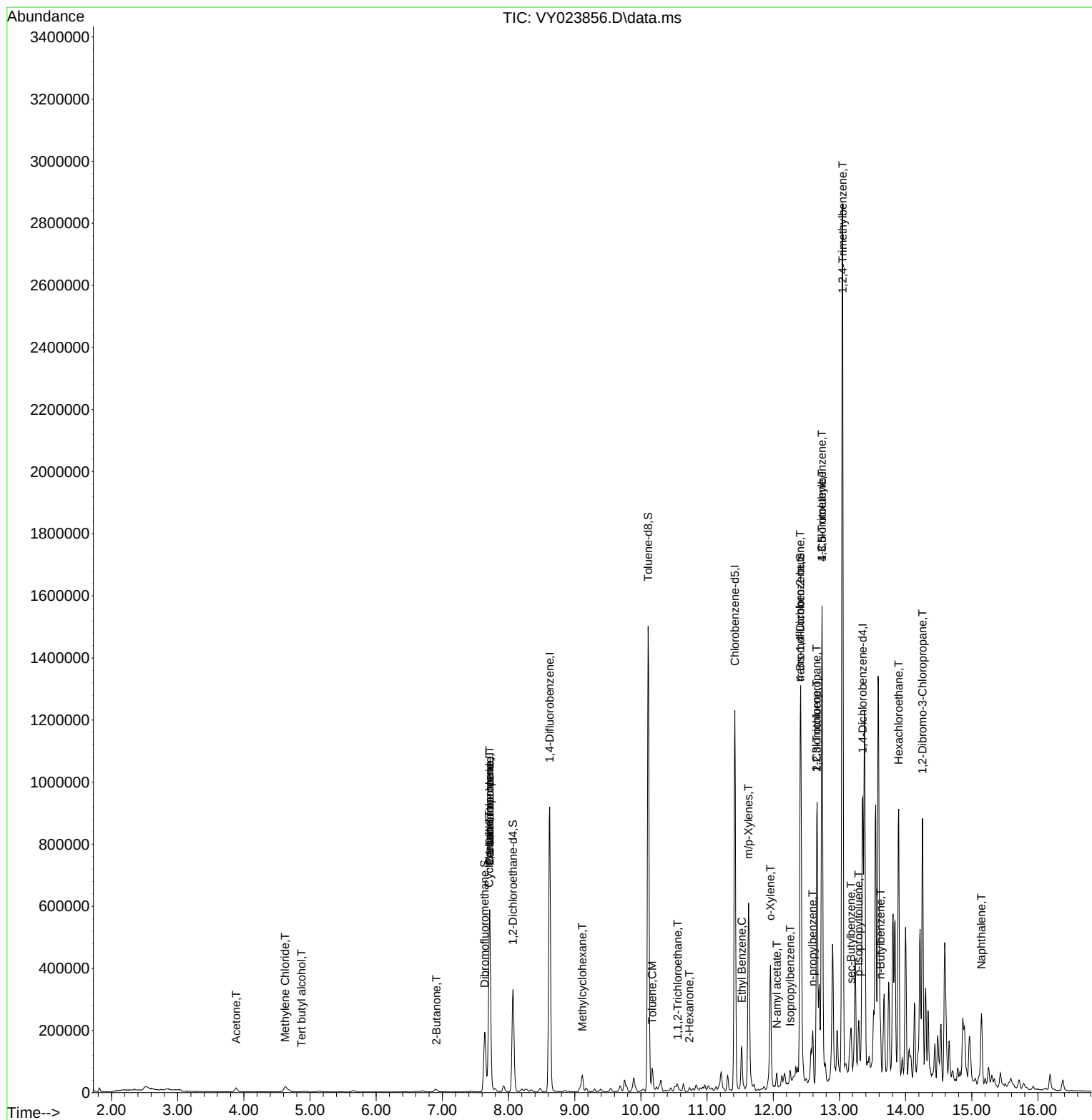
Internal Standards						
1) Pentafluorobenzene	7.713	168	438040	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	779211	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	643605	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	232370	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	256472	60.122	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 120.240%	
35) Dibromofluoromethane	7.640	113	136301	29.528	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 59.060%	
50) Toluene-d8	10.109	98	942973	51.431	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 102.860%	
62) 4-Bromofluorobenzene	12.407	95	254757	42.229	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 84.460%	
Target Compounds						
					Qvalue	
11) Tert butyl alcohol	4.872	59	371	1.059	ug/l #	69
16) Acetone	3.885	43	22873	18.610	ug/l	97
20) Methylene Chloride	4.622	84	11359	2.186	ug/l	93
25) 2-Butanone	6.908	43	4580	3.053	ug/l #	87
31) Cyclohexane	7.707	56	16104	1.964	ug/l #	46
36) 1,1-Dichloropropene	7.713	75	34406	4.861	ug/l #	50
38) Carbon Tetrachloride	7.713	117	44131	5.681	ug/l #	17
39) Methylcyclohexane	9.115	83	17749	1.899	ug/l	93
52) Toluene	10.170	92	27673	2.050	ug/l	94
55) 1,1,2-Trichloroethane	10.554	97	7853	2.104	ug/l #	22
59) 2-Hexanone	10.731	43	6020	2.486	ug/l #	27
67) Ethyl Benzene	11.523	91	88290	3.659	ug/l	99
68) m/p-Xylenes	11.627	106	171586	18.453	ug/l	100
69) o-Xylene	11.956	106	100354	11.512	ug/l	99
73) Isopropylbenzene	12.255	105	27259	1.653	ug/l	97
74) N-amyl acetate	12.054	43	11539	3.132	ug/l #	67
76) 1,2,3-Trichloropropane	12.657	75	4182	2.070	ug/l #	100
78) n-propylbenzene	12.596	91	122993	6.194	ug/l	99
79) 2-Chlorotoluene	12.657	91	85330	7.467	ug/l #	41
80) 1,3,5-Trimethylbenzene	12.737	105	627983	46.645	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.407	75	137456	143.780	ug/l #	14
82) 4-Chlorotoluene	12.737	91	69040	5.883	ug/l #	42
84) 1,2,4-Trimethylbenzene	13.048	105	1531343	113.814	ug/l	99
85) sec-Butylbenzene	13.176	105	77023	4.314	ug/l #	65
86) p-Isopropyltoluene	13.291	119	69500	4.657	ug/l	100
89) n-Butylbenzene	13.621	91	78724	5.754	ug/l #	69
90) Hexachloroethane	13.895	117	35246	11.242	ug/l #	11
92) 1,2-Dibromo-3-Chloropr...	14.255	75	3255	7.162	ug/l #	1
95) Naphthalene	15.145	128	168556	24.657	ug/l	98

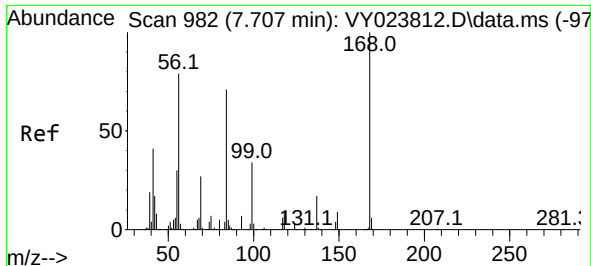
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Thu Nov 27 01:14:36 2025
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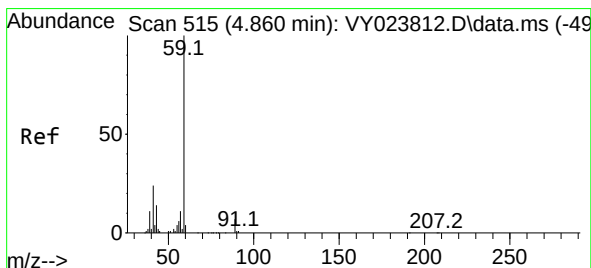
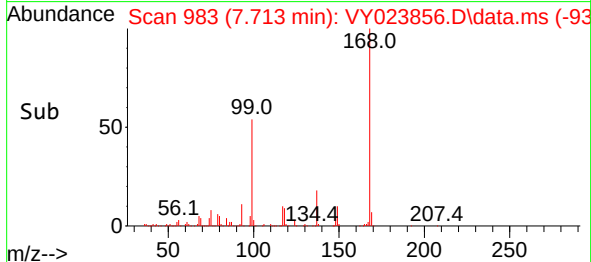
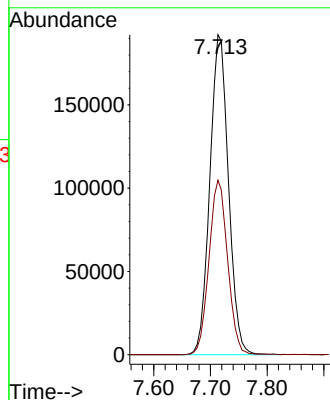
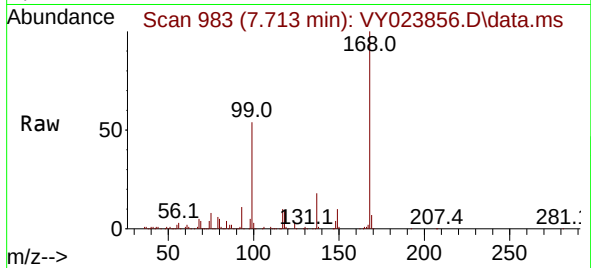




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.713 min Scan# 91
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

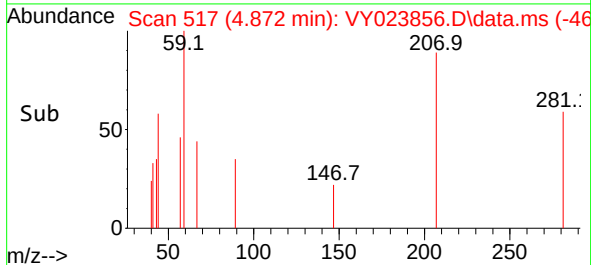
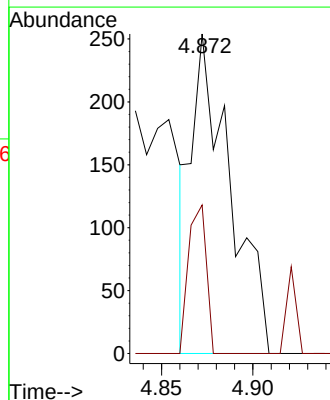
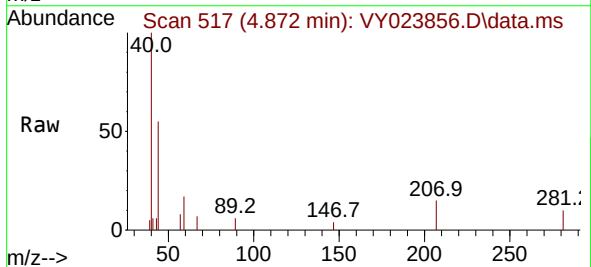
Instrument :
MSVOA_Y
ClientSampleId :

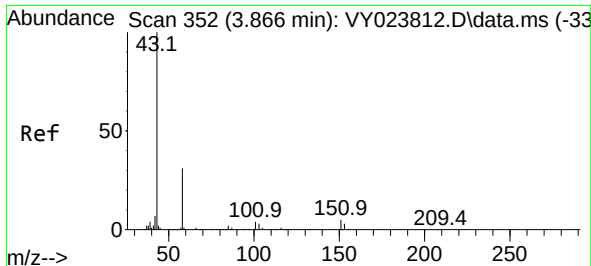
Tgt Ion:168 Resp: 438040
Ion Ratio Lower Upper
168 100
99 54.5 44.0 66.0



#11
Tert butyl alcohol
Concen: 1.059 ug/l
RT: 4.872 min Scan# 517
Delta R.T. 0.012 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 59 Resp: 371
Ion Ratio Lower Upper
59 100
57 21.6 8.0 12.0#





#16

Acetone

Concen: 18.610 ug/l

RT: 3.885 min Scan# 3

Delta R.T. 0.018 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

Instrument :

MSVOA_Y

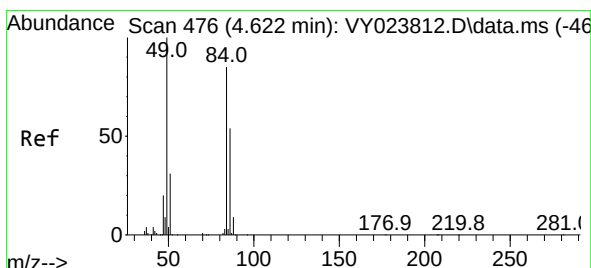
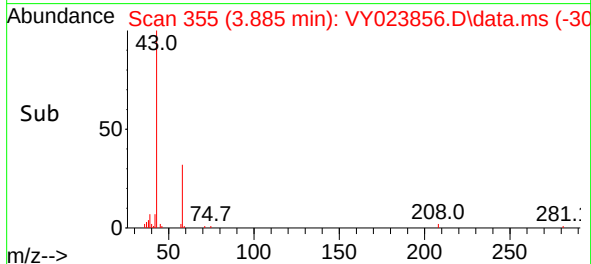
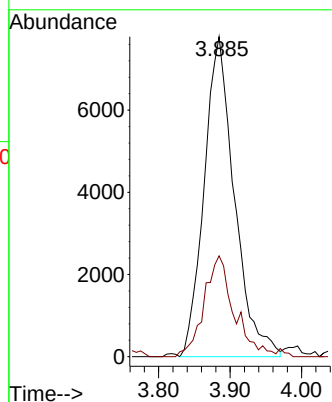
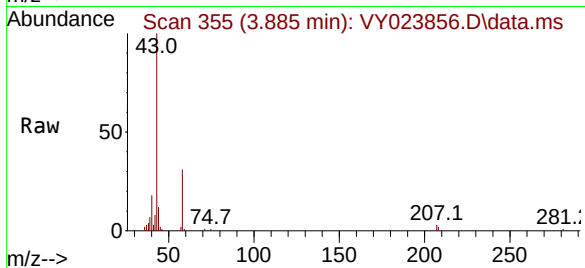
ClientSampleId :

Tgt Ion: 43 Resp: 22873

Ion Ratio Lower Upper

43 100

58 30.0 25.4 38.2



#20

Methylene Chloride

Concen: 2.186 ug/l

RT: 4.622 min Scan# 476

Delta R.T. -0.000 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

Tgt Ion: 84 Resp: 11359

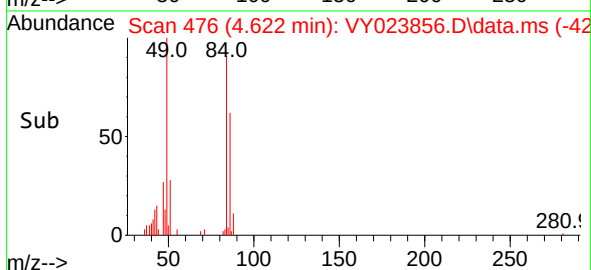
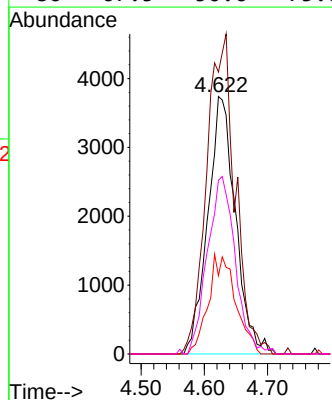
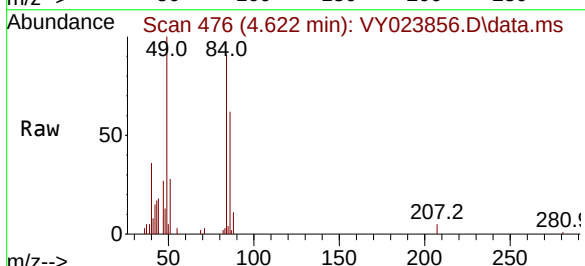
Ion Ratio Lower Upper

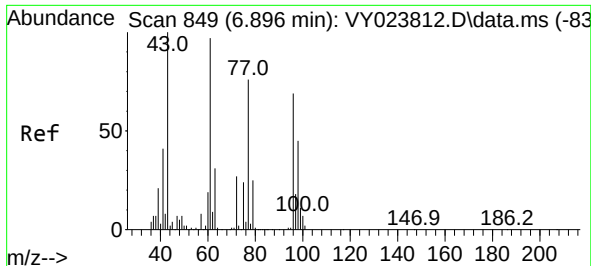
84 100

49 109.5 94.0 141.0

51 30.4 29.2 43.8

86 67.5 50.6 75.8

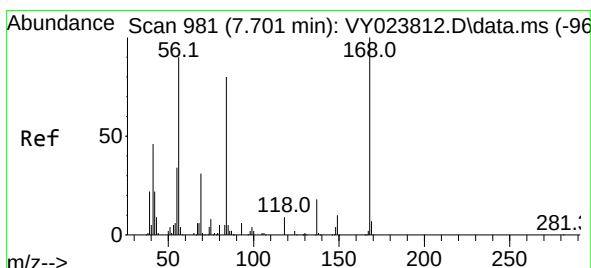
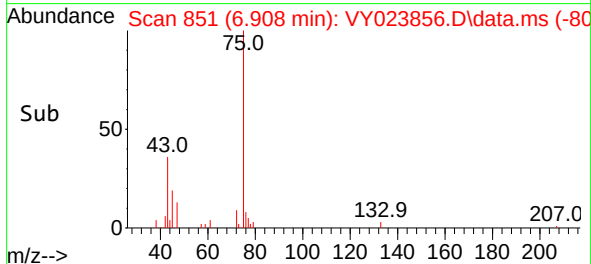
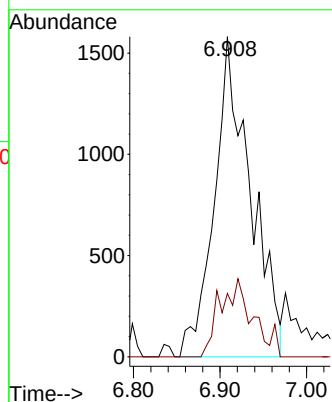
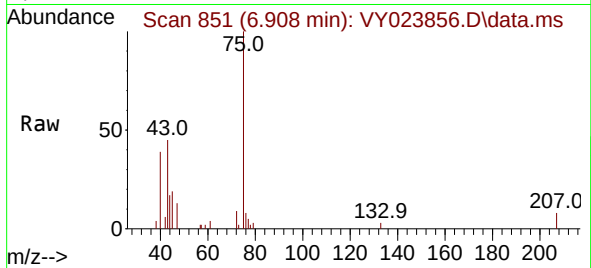




#25
2-Butanone
Concen: 3.053 ug/l
RT: 6.908 min Scan# 81
Delta R.T. 0.012 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

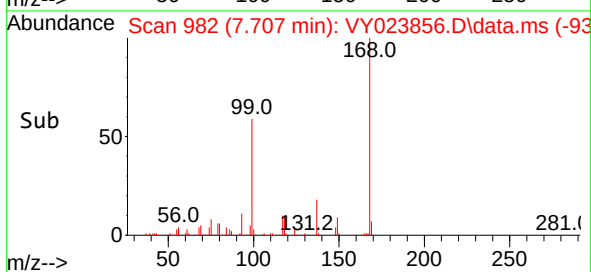
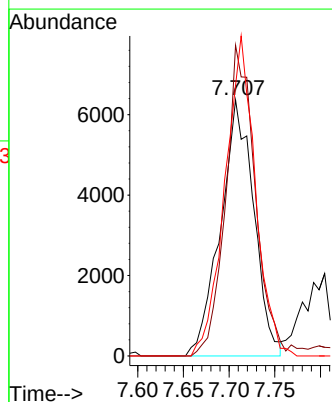
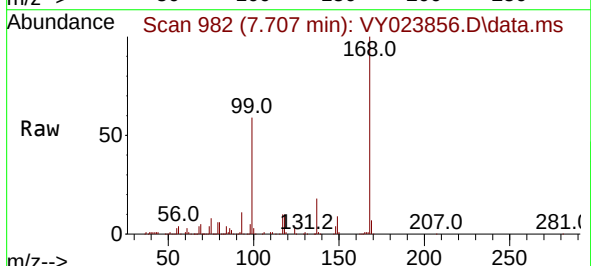
Instrument :
MSVOA_Y
ClientSampleId :

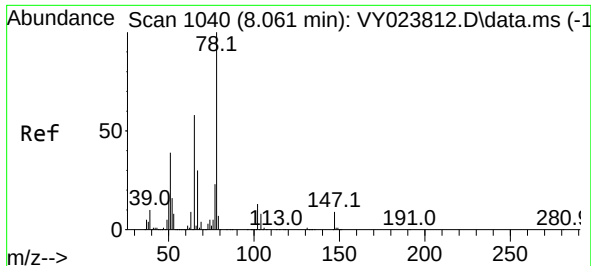
Tgt Ion: 43 Resp: 4580
Ion Ratio Lower Upper
43 100
72 19.8 21.3 31.9#



#31
Cyclohexane
Concen: 1.964 ug/l
RT: 7.707 min Scan# 982
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 56 Resp: 16104
Ion Ratio Lower Upper
56 100
69 121.3 27.8 41.6#
84 105.7 71.8 107.8





#33

1,2-Dichloroethane-d4

Concen: 60.122 ug/l

RT: 8.067 min Scan# 110

Delta R.T. 0.006 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

Instrument :

MSVOA_Y

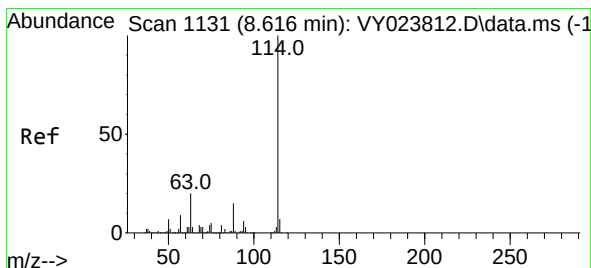
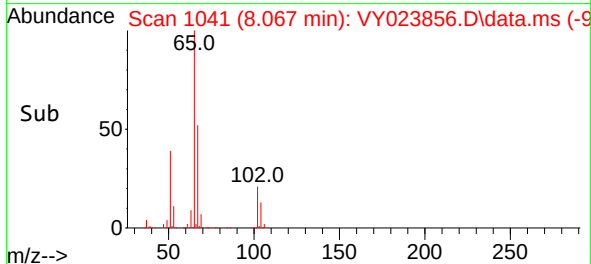
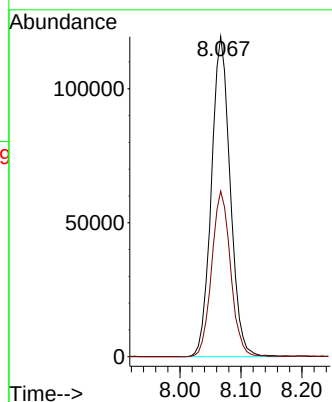
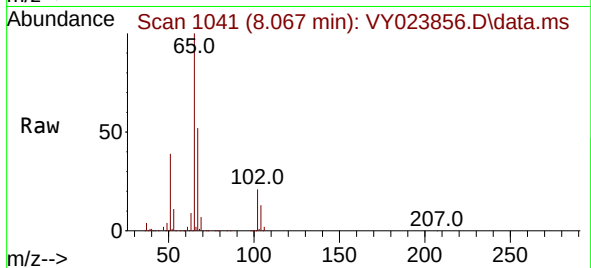
ClientSampleId :

Tgt Ion: 65 Resp: 256472

Ion Ratio Lower Upper

65 100

67 52.0 0.0 107.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

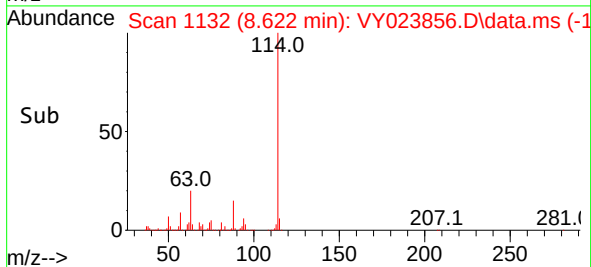
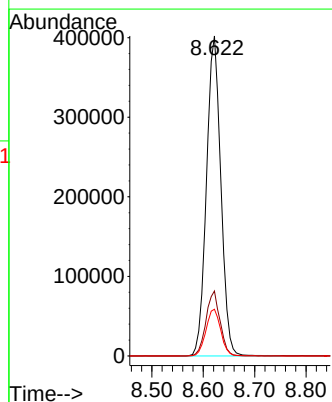
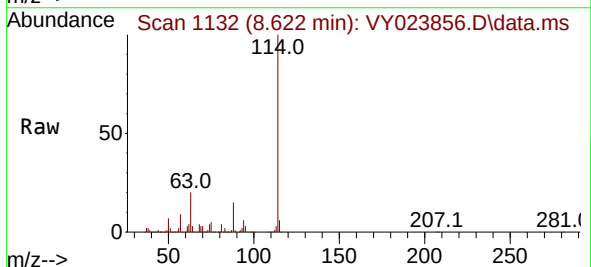
Tgt Ion:114 Resp: 779211

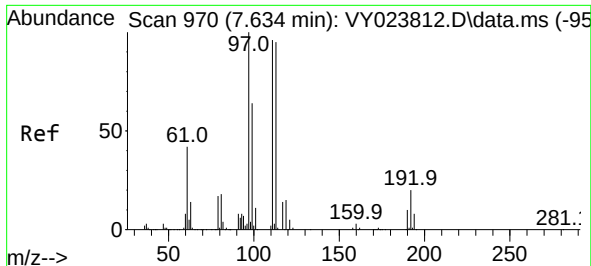
Ion Ratio Lower Upper

114 100

63 20.3 0.0 39.4

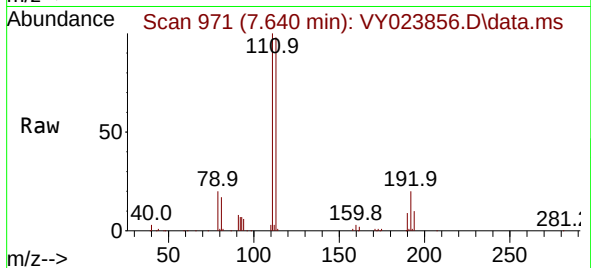
88 14.6 0.0 30.8



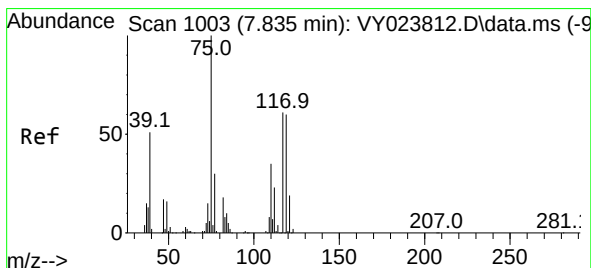
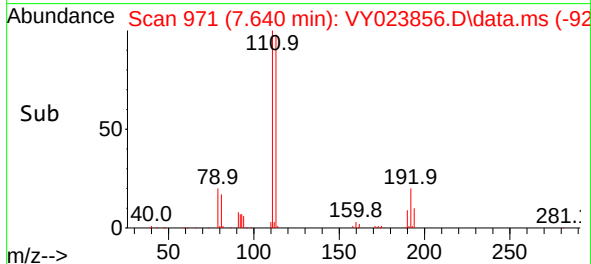
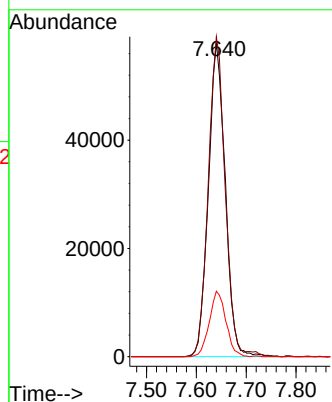


#35
Dibromofluoromethane
Concen: 29.528 ug/l
RT: 7.640 min Scan# 91
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Instrument :
MSVOA_Y
ClientSampleId :

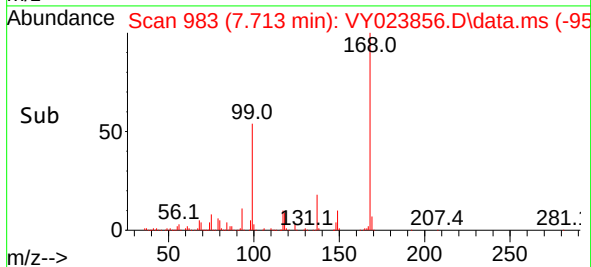
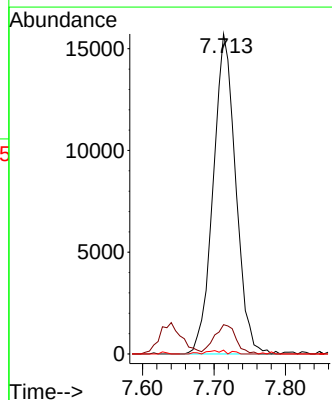
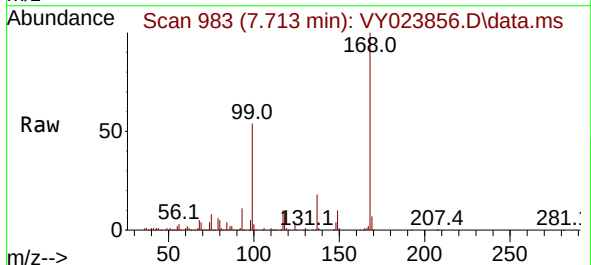


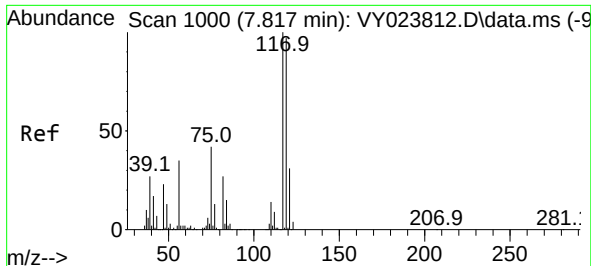
Tgt Ion:113 Resp: 136301
Ion Ratio Lower Upper
113 100
111 101.3 81.4 122.0
192 20.6 15.8 23.8



#36
1,1-Dichloropropene
Concen: 4.861 ug/l
RT: 7.713 min Scan# 983
Delta R.T. -0.122 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

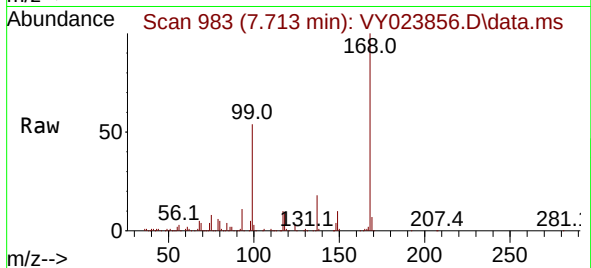
Tgt Ion: 75 Resp: 34406
Ion Ratio Lower Upper
75 100
110 8.8 17.6 52.8#
77 0.8 24.9 37.3#



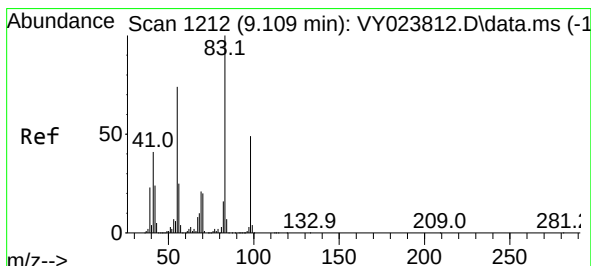
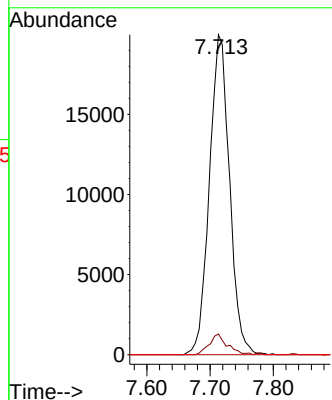
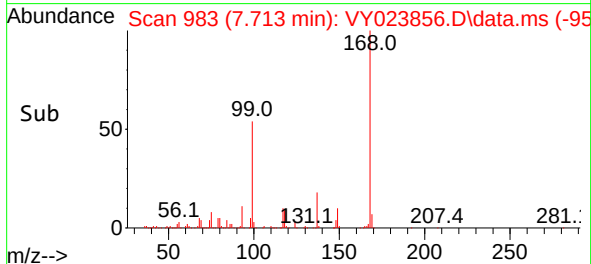


#38
Carbon Tetrachloride
Concen: 5.681 ug/l
RT: 7.713 min Scan# 91
Delta R.T. -0.104 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

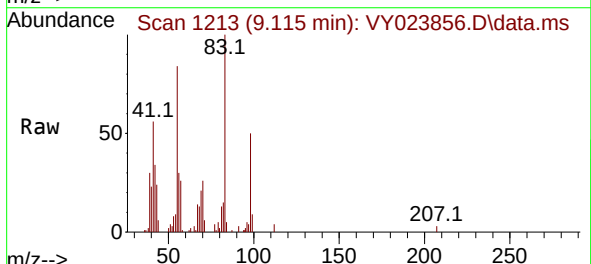
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MSVOA_Y
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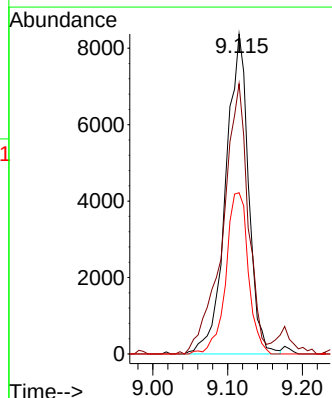
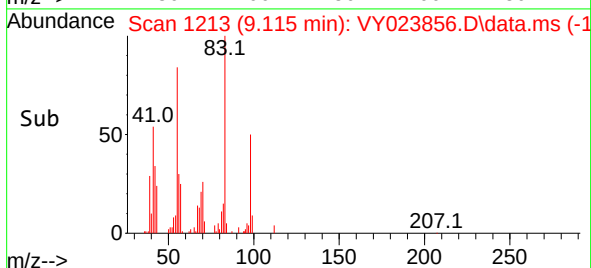
Tgt Ion:117 Resp: 44131
Ion Ratio Lower Upper
117 100
119 6.5 77.3 115.9#
121 0.0 25.0 37.6#

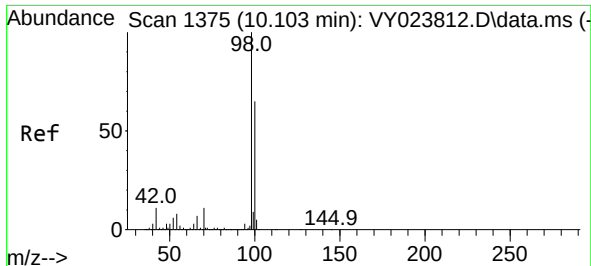


#39
Methylcyclohexane
Concen: 1.899 ug/l
RT: 9.115 min Scan# 1213
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18



Tgt Ion: 83 Resp: 17749
Ion Ratio Lower Upper
83 100
55 83.8 59.4 89.2
98 50.4 39.5 59.3

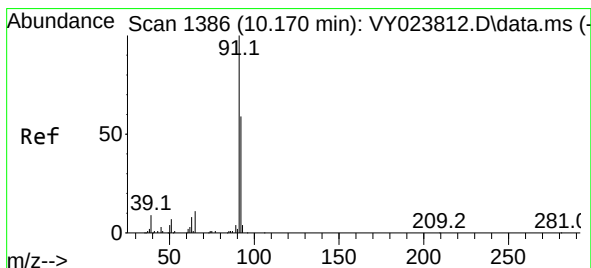
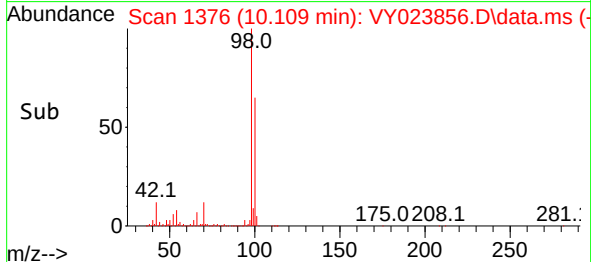
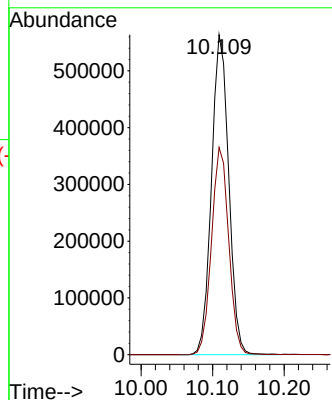
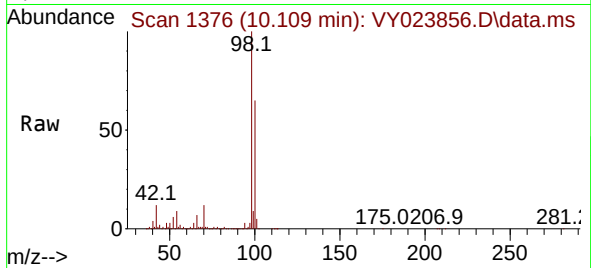




#50
Toluene-d8
Concen: 51.431 ug/l
RT: 10.109 min Scan# 1375
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

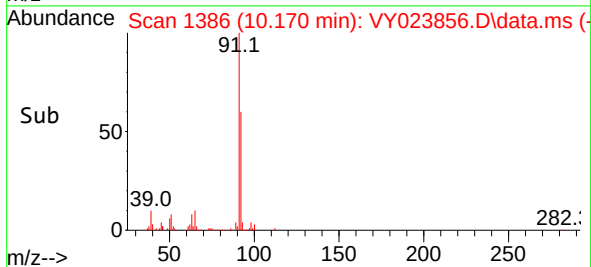
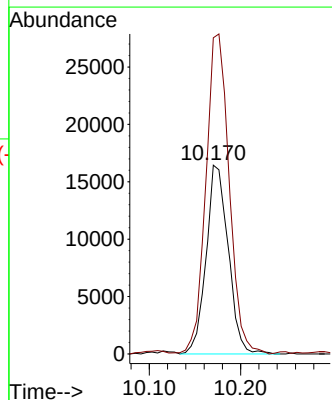
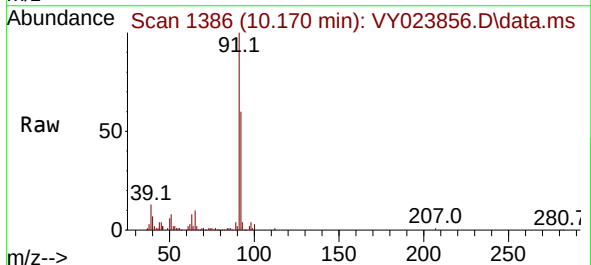
Instrument :
MSVOA_Y
ClientSampleId :

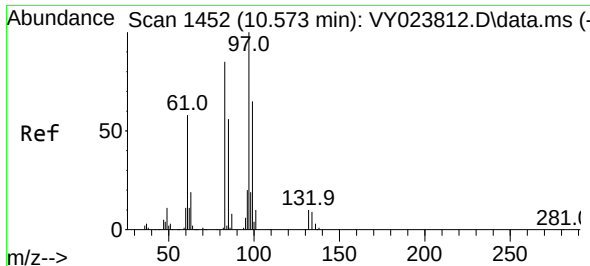
Tgt Ion: 98 Resp: 942973
Ion Ratio Lower Upper
98 100
100 64.8 51.9 77.9



#52
Toluene
Concen: 2.050 ug/l
RT: 10.170 min Scan# 1386
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

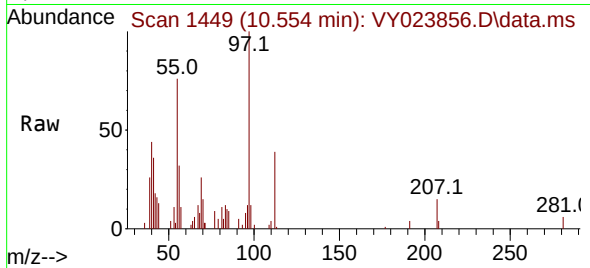
Tgt Ion: 92 Resp: 27673
Ion Ratio Lower Upper
92 100
91 178.8 136.8 205.2



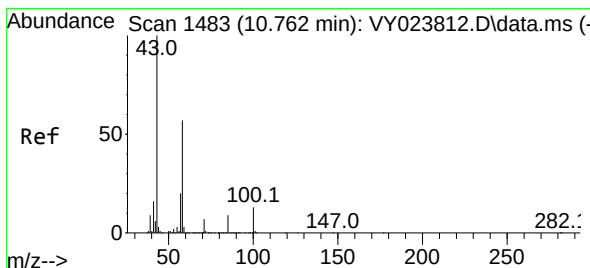
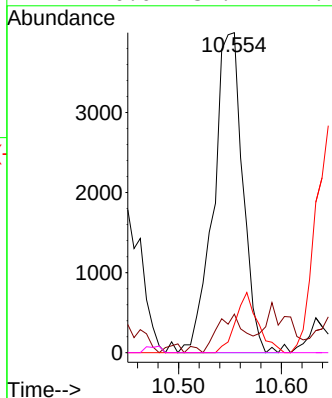
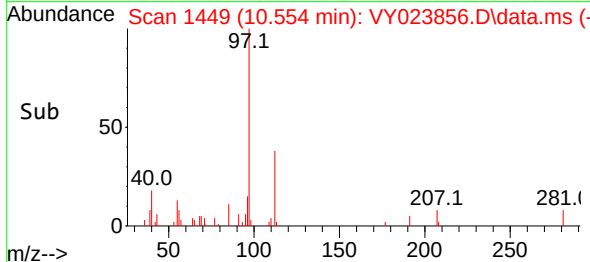


#55
1,1,2-Trichloroethane
Concen: 2.104 ug/l
RT: 10.554 min Scan# 1452
Delta R.T. -0.018 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

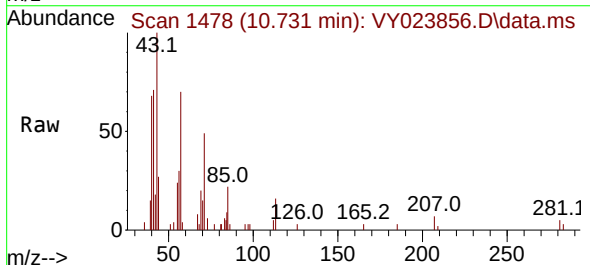
Instrument :
MSVOA_Y
ClientSampleId :



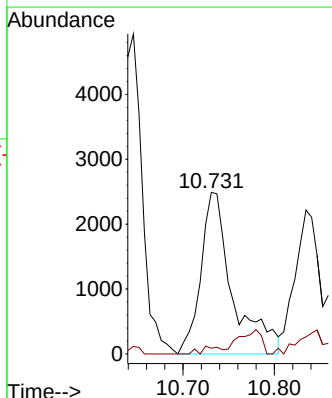
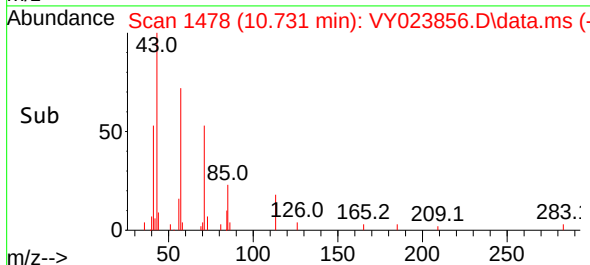
Tgt Ion: 97 Resp: 7853
Ion Ratio Lower Upper
97 100
83 9.3 68.1 102.1#
85 8.9 45.0 67.4#
99 0.0 51.9 77.9#

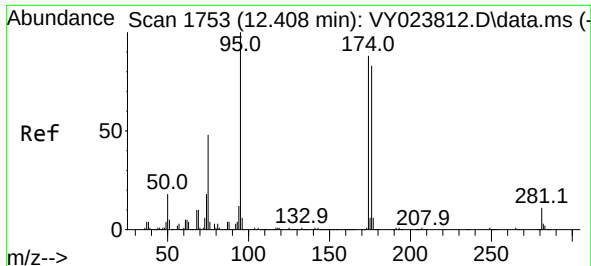


#59
2-Hexanone
Concen: 2.486 ug/l
RT: 10.731 min Scan# 1478
Delta R.T. -0.031 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18



Tgt Ion: 43 Resp: 6020
Ion Ratio Lower Upper
43 100
58 2.8 28.3 85.0#





#62

4-Bromofluorobenzene

Concen: 42.229 ug/l

RT: 12.407 min Scan# 11

Delta R.T. -0.000 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

Instrument :

MSVOA_Y

ClientSampleId :

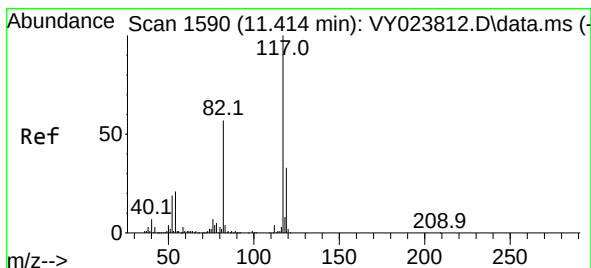
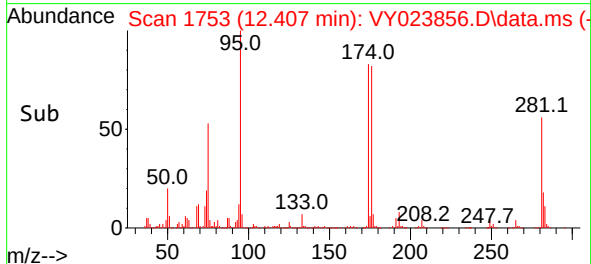
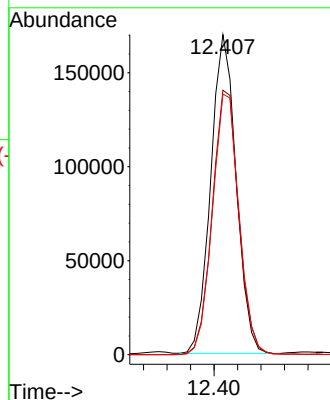
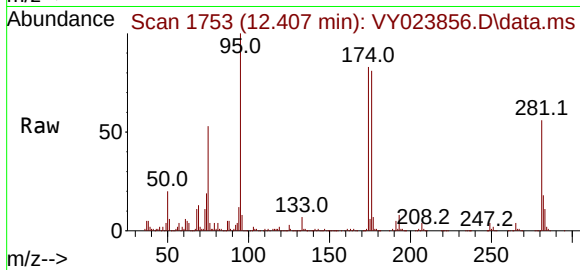
Tgt Ion: 95 Resp: 254757

Ion Ratio Lower Upper

95 100

174 86.2 0.0 168.6

176 85.6 0.0 164.6



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.006 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

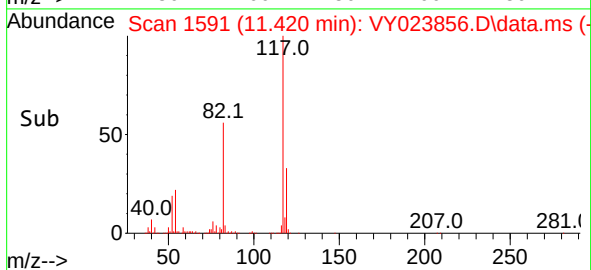
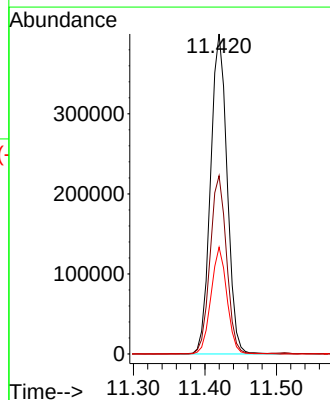
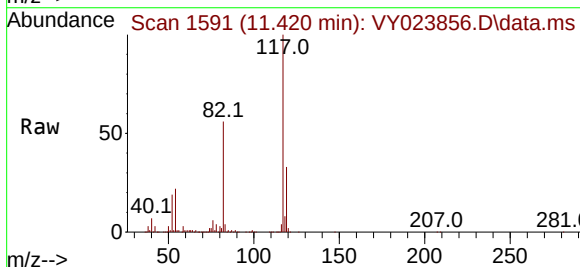
Tgt Ion: 117 Resp: 643605

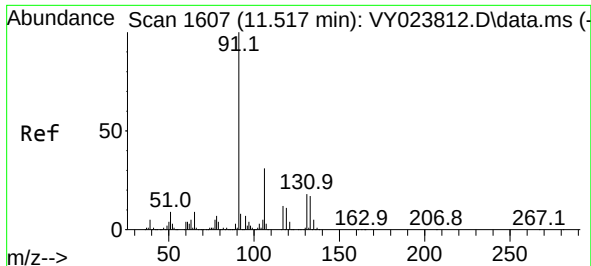
Ion Ratio Lower Upper

117 100

82 55.5 45.4 68.0

119 33.4 26.0 39.0

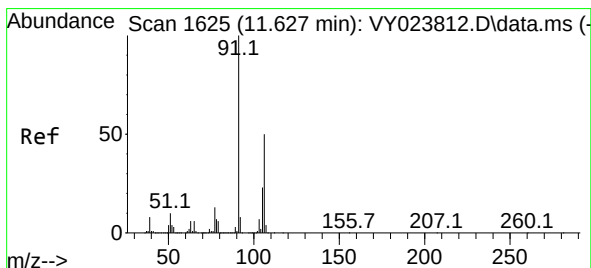
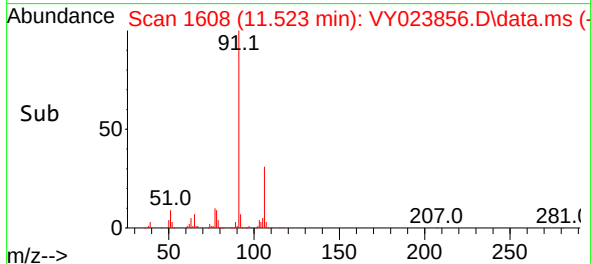
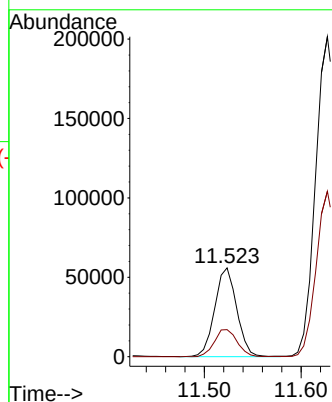
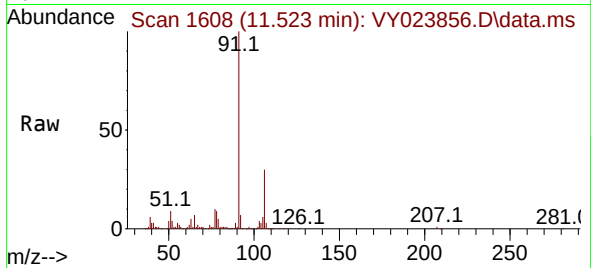




#67
Ethyl Benzene
Concen: 3.659 ug/l
RT: 11.523 min Scan# 1608
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

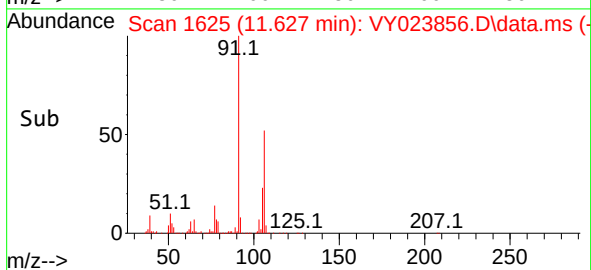
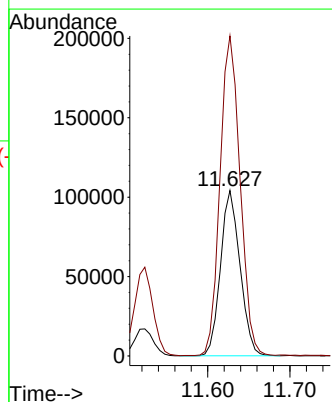
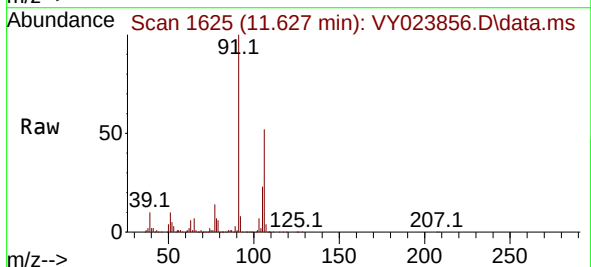
Instrument :
MSVOA_Y
ClientSampleId :

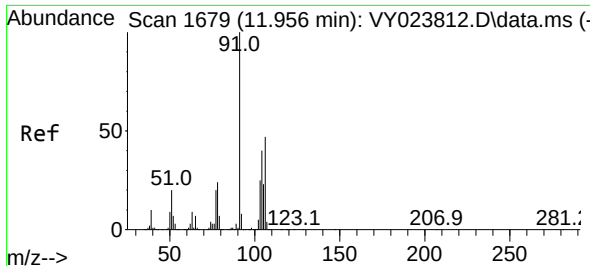
Tgt Ion: 91 Resp: 88290
Ion Ratio Lower Upper
91 100
106 30.5 24.9 37.3



#68
m/p-Xylenes
Concen: 18.453 ug/l
RT: 11.627 min Scan# 1625
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion:106 Resp: 171586
Ion Ratio Lower Upper
106 100
91 198.9 159.5 239.3

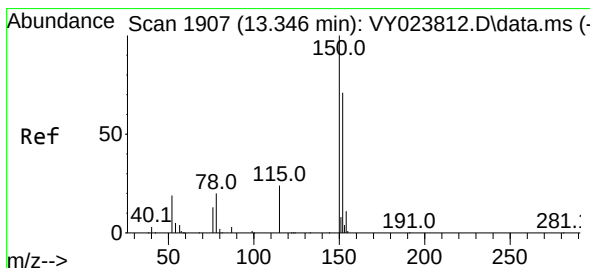
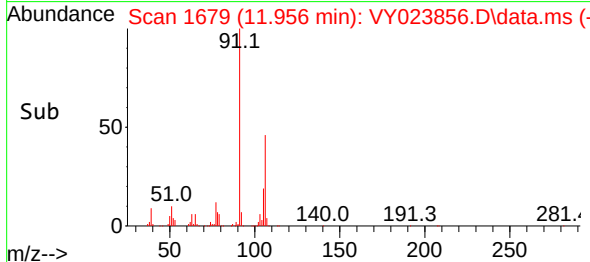
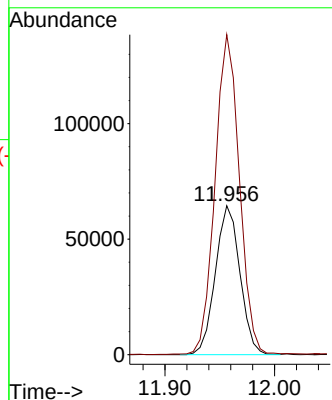
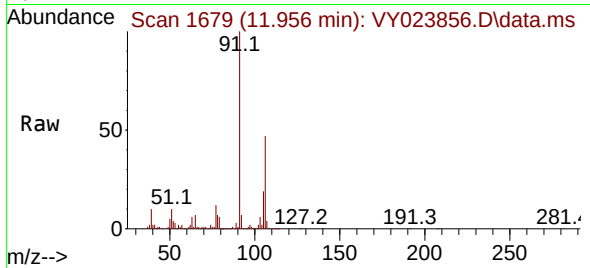




#69
o-Xylene
Concen: 11.512 ug/l
RT: 11.956 min Scan# 1679
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

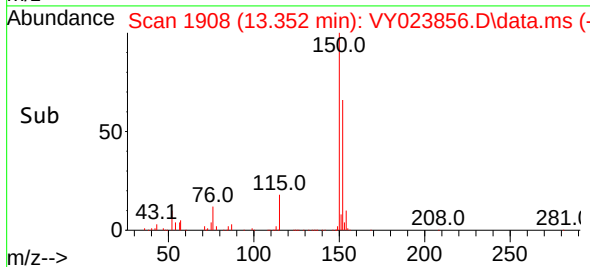
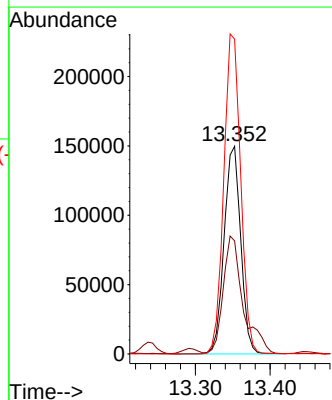
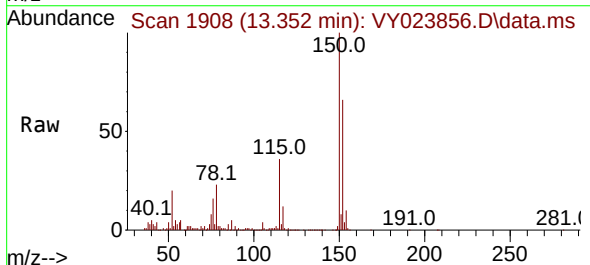
Instrument :
MSVOA_Y
ClientSampleId :

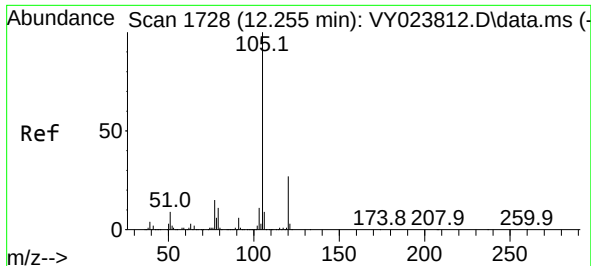
Tgt Ion:106 Resp: 100354
Ion Ratio Lower Upper
106 100
91 214.2 106.5 319.6



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.352 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion:152 Resp: 232370
Ion Ratio Lower Upper
152 100
115 67.8 28.7 86.3
150 156.7 0.0 345.6

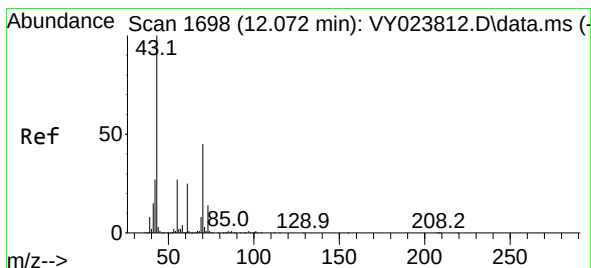
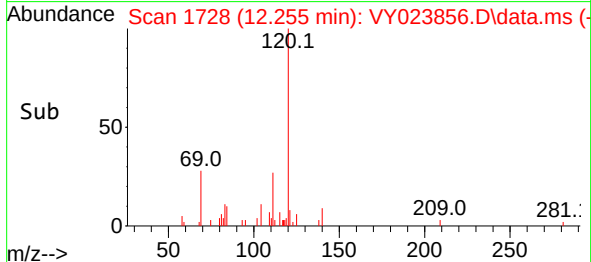
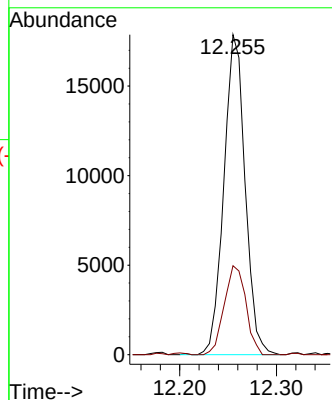
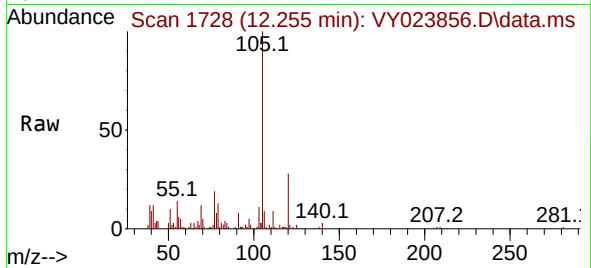




#73
Isopropylbenzene
Concen: 1.653 ug/l
RT: 12.255 min Scan# 1728
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

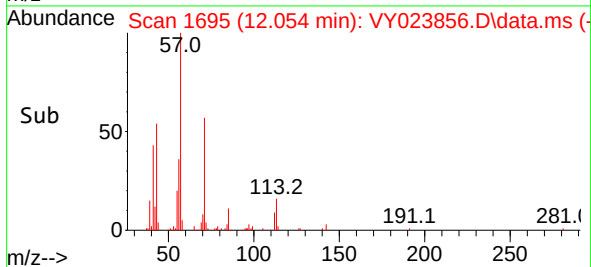
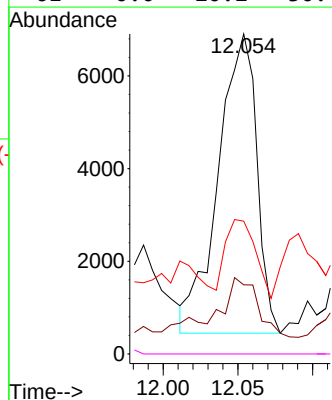
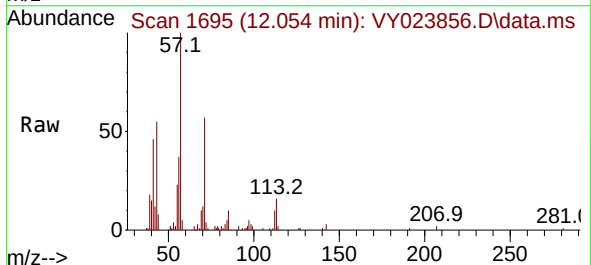
Instrument :
MSVOA_Y
ClientSampleId :

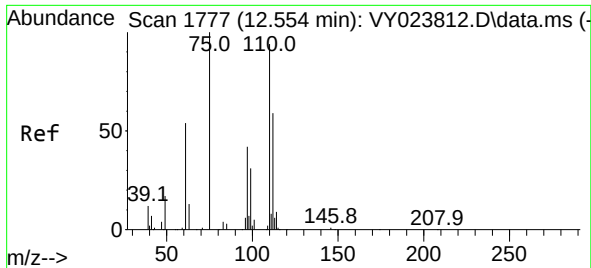
Tgt Ion:105 Resp: 27259
Ion Ratio Lower Upper
105 100
120 28.3 13.3 39.8



#74
N-ethyl acetate
Concen: 3.132 ug/l
RT: 12.054 min Scan# 1695
Delta R.T. -0.018 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 43 Resp: 11539
Ion Ratio Lower Upper
43 100
70 22.2 36.2 54.2#
55 20.3 21.8 32.8#
61 0.0 20.2 30.4#

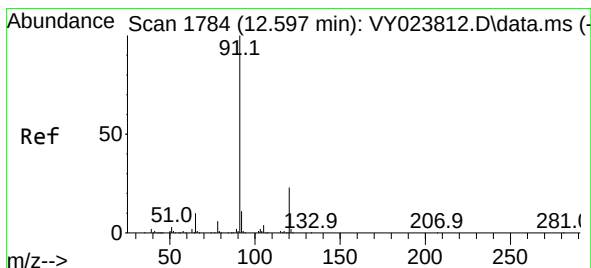
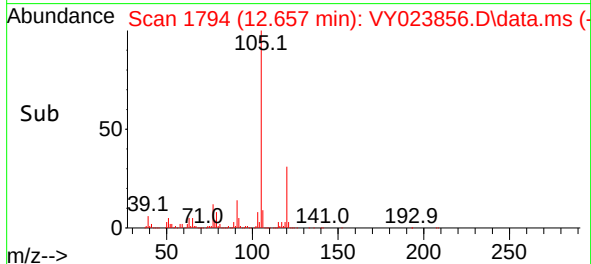
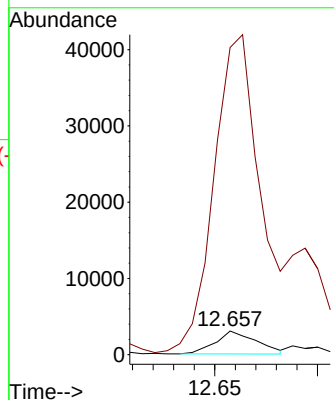
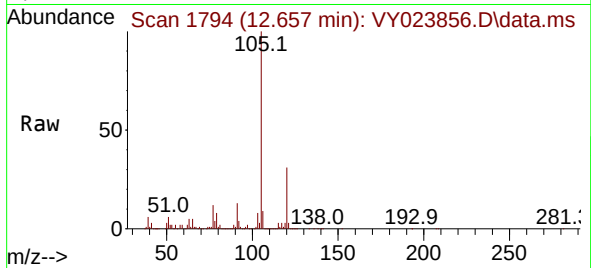




#76
1,2,3-Trichloropropane
Concen: 2.070 ug/l
RT: 12.657 min Scan# 1777
Delta R.T. 0.104 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

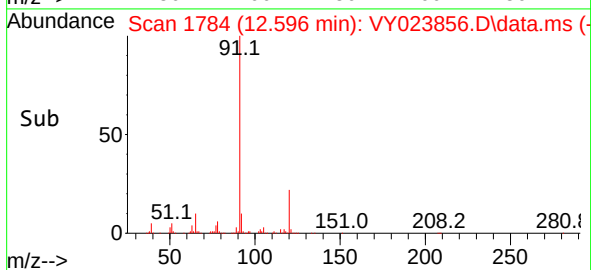
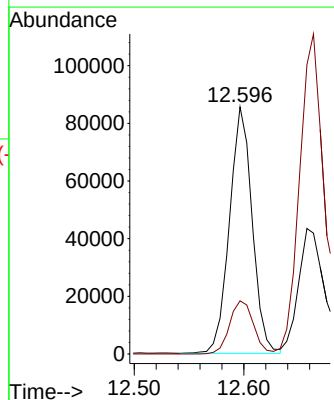
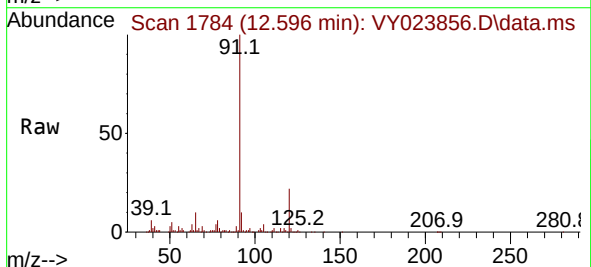
Instrument :
MSVOA_Y
ClientSampleId :

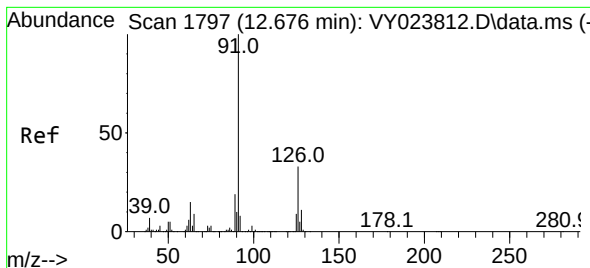
Tgt Ion: 75 Resp: 4182
Ion Ratio Lower Upper
75 100
77 1553.1 0.0 0.0#



#78
n-propylbenzene
Concen: 6.194 ug/l
RT: 12.596 min Scan# 1784
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 91 Resp: 122993
Ion Ratio Lower Upper
91 100
120 22.7 11.6 34.8

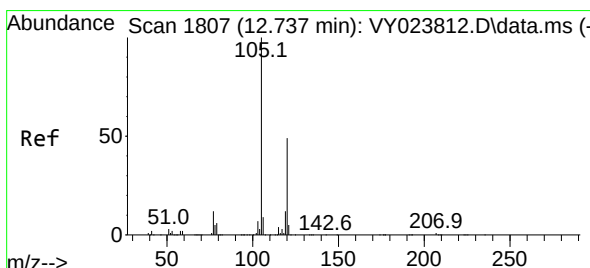
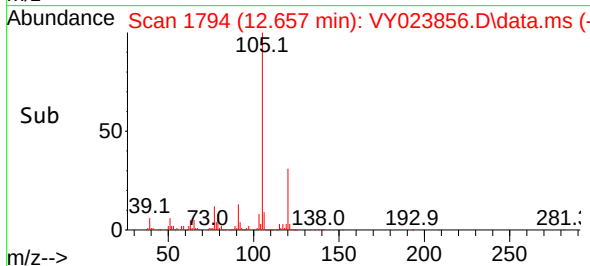
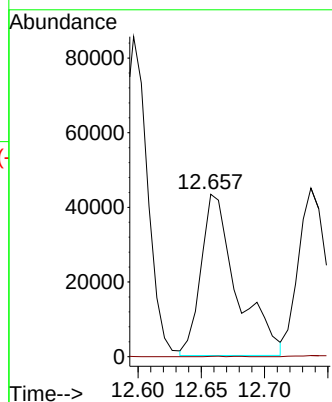
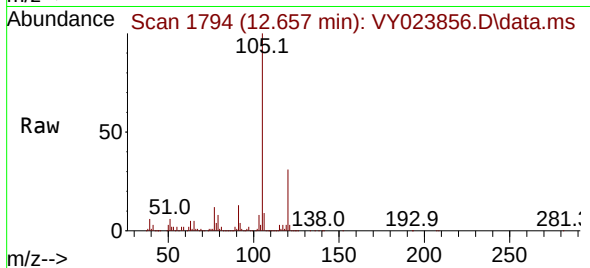




#79
2-Chlorotoluene
Concen: 7.467 ug/l
RT: 12.657 min Scan# 1794
Delta R.T. -0.018 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

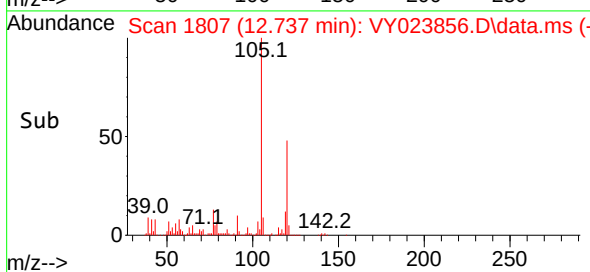
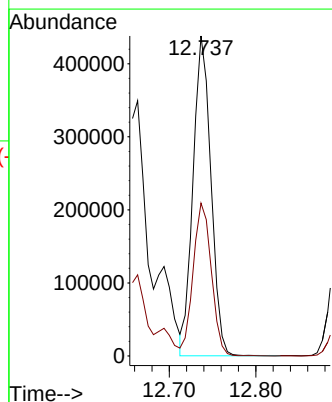
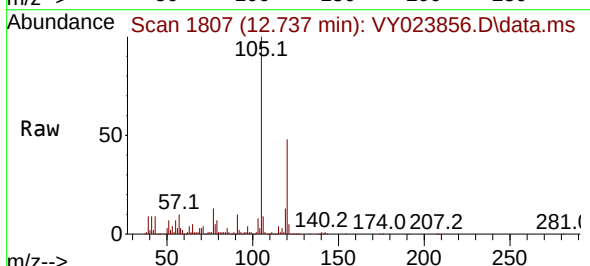
Instrument :
MSVOA_Y
ClientSampleId :

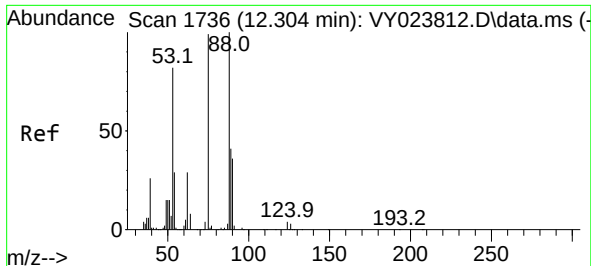
Tgt Ion: 91 Resp: 85330
Ion Ratio Lower Upper
91 100
126 0.1 17.0 50.9#



#80
1,3,5-Trimethylbenzene
Concen: 46.645 ug/l
RT: 12.737 min Scan# 1807
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 105 Resp: 627983
Ion Ratio Lower Upper
105 100
120 48.4 24.6 73.8

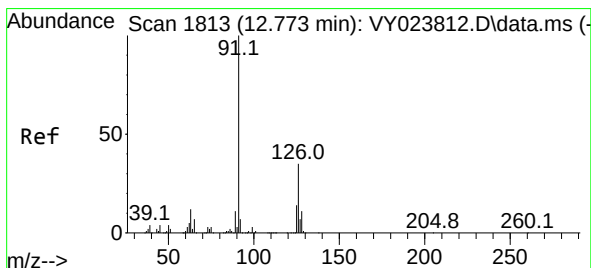
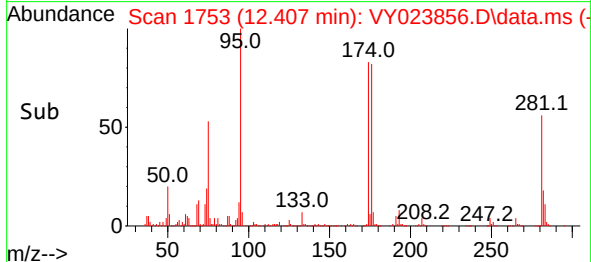
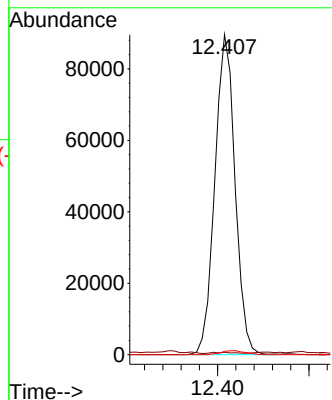
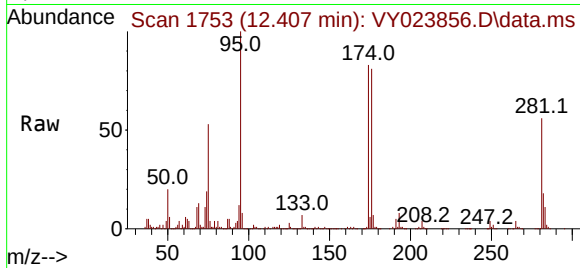




#81
 trans-1,4-Dichloro-2-butene
 Concen: 143.780 ug/l
 RT: 12.407 min Scan# 11
 Delta R.T. 0.104 min
 Lab File: VY023856.D
 Acq: 02 Dec 2025 13:18

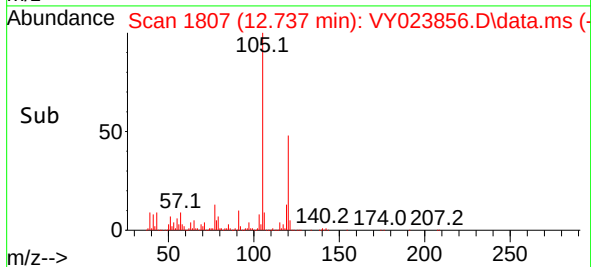
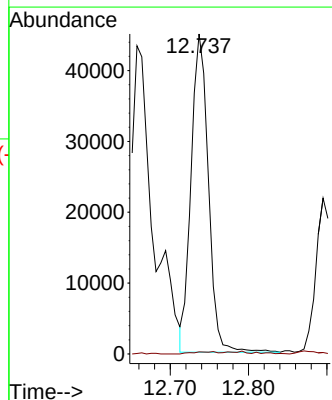
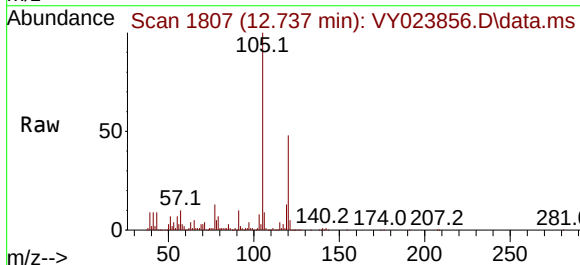
Instrument :
 MSVOA_Y
 ClientSampleId :

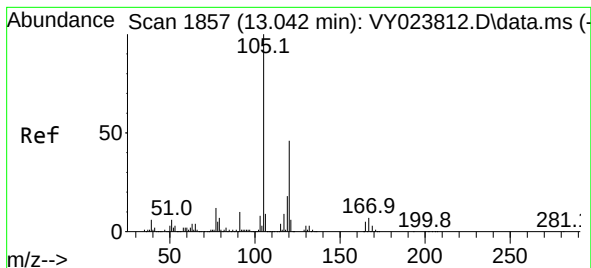
Tgt Ion: 75 Resp: 137456
 Ion Ratio Lower Upper
 75 100
 53 0.4 71.3 106.9#
 89 0.0 37.0 55.4#



#82
 4-Chlorotoluene
 Concen: 5.883 ug/l
 RT: 12.737 min Scan# 1807
 Delta R.T. -0.037 min
 Lab File: VY023856.D
 Acq: 02 Dec 2025 13:18

Tgt Ion: 91 Resp: 69040
 Ion Ratio Lower Upper
 91 100
 126 1.0 17.0 50.9#





#84

1,2,4-Trimethylbenzene

Concen: 113.814 ug/l

RT: 13.048 min Scan# 1857

Delta R.T. 0.006 min

Lab File: VY023856.D

Acq: 02 Dec 2025 13:18

Instrument :

MSVOA_Y

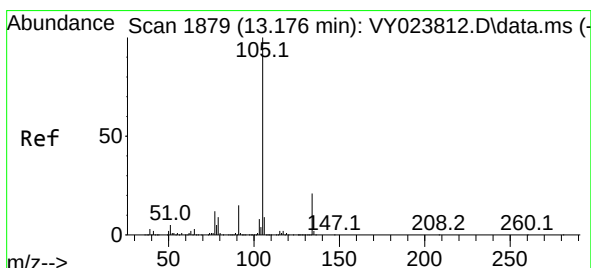
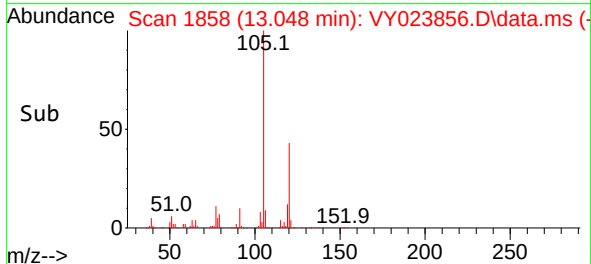
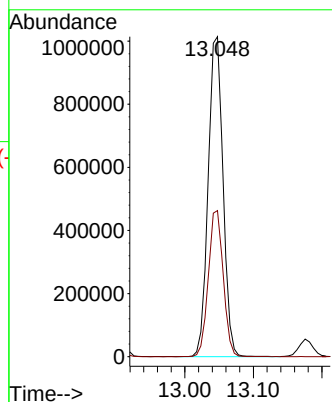
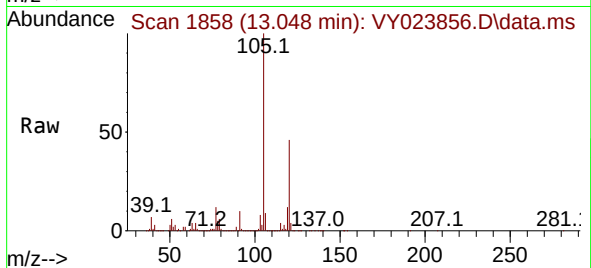
ClientSampleId :

Tgt Ion:105 Resp: 1531343

Ion Ratio Lower Upper

105 100

120 45.9 22.5 67.5



#85

sec-Butylbenzene

Concen: 4.314 ug/l

RT: 13.176 min Scan# 1879

Delta R.T. -0.000 min

Lab File: VY023856.D

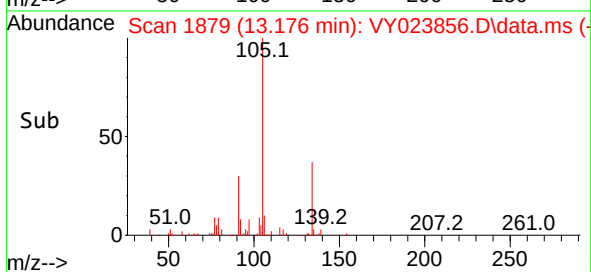
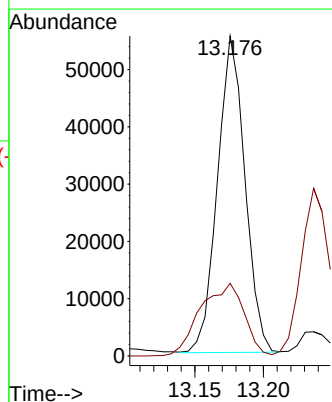
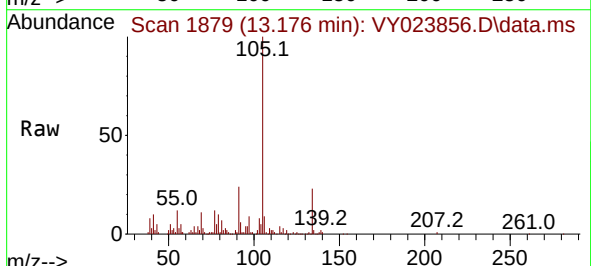
Acq: 02 Dec 2025 13:18

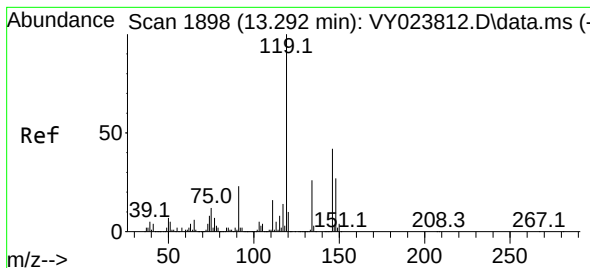
Tgt Ion:105 Resp: 77023

Ion Ratio Lower Upper

105 100

134 36.5 10.2 30.6#

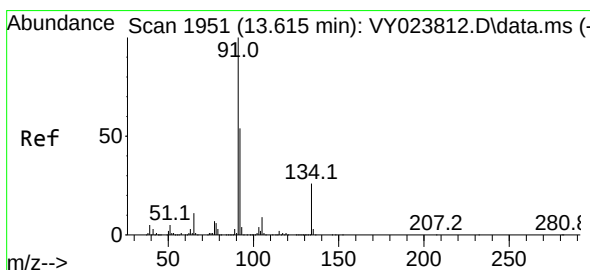
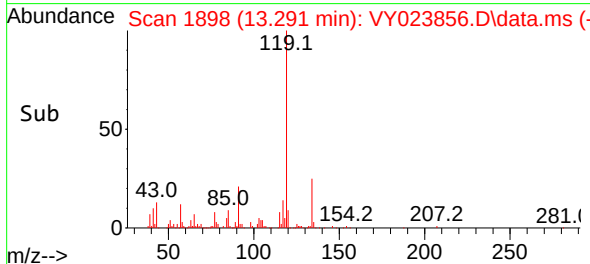
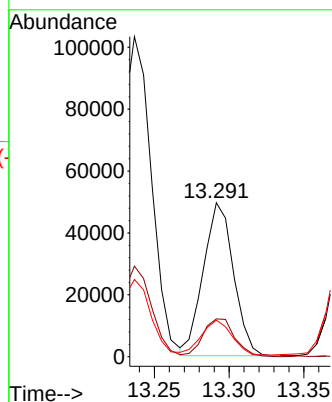
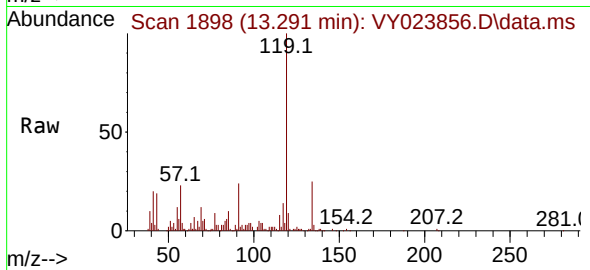




#86
p-Isopropyltoluene
Concen: 4.657 ug/l
RT: 13.291 min Scan# 1898
Delta R.T. -0.000 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

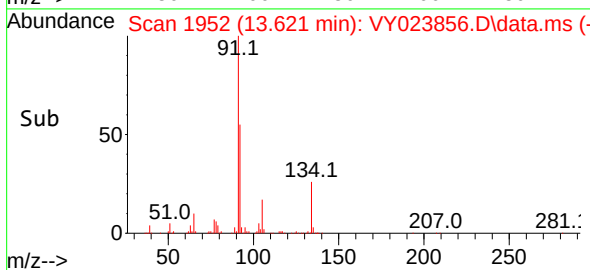
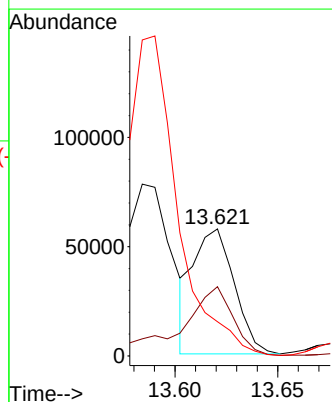
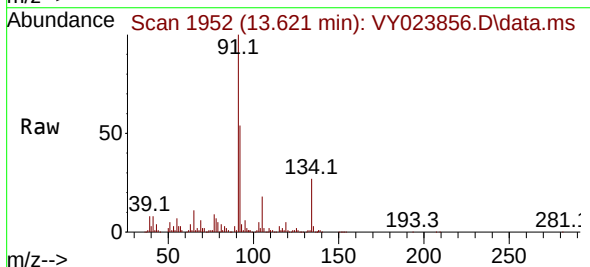
Instrument :
MSVOA_Y
ClientSampleId :

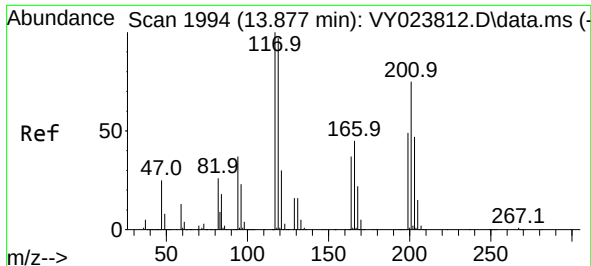
Tgt Ion:119 Resp: 69500
Ion Ratio Lower Upper
119 100
134 25.9 13.1 39.3
91 22.7 11.5 34.4



#89
n-Butylbenzene
Concen: 5.754 ug/l
RT: 13.621 min Scan# 1952
Delta R.T. 0.006 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

Tgt Ion: 91 Resp: 78724
Ion Ratio Lower Upper
91 100
92 68.5 26.8 80.3
134 0.0 13.0 39.0#

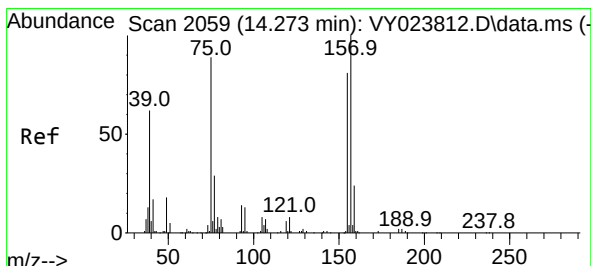
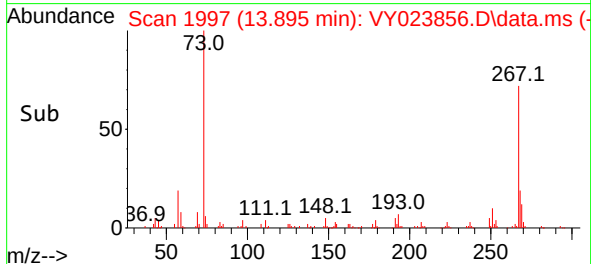
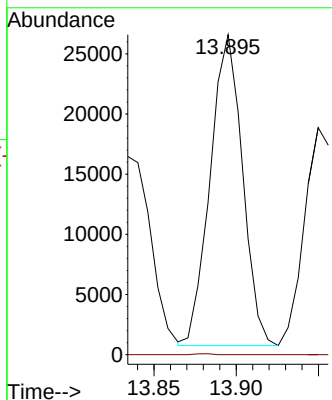
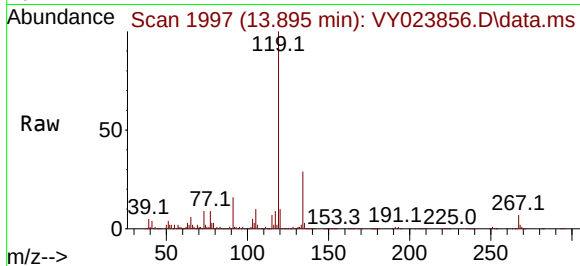




#90
Hexachloroethane
Concen: 11.242 ug/l
RT: 13.895 min Scan# 1997
Delta R.T. 0.018 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

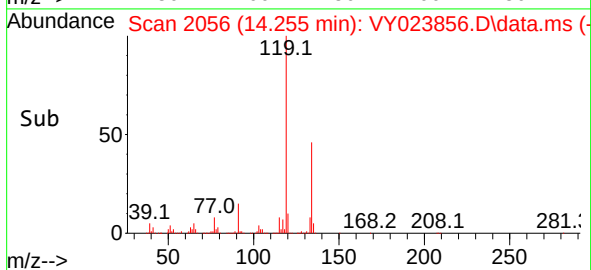
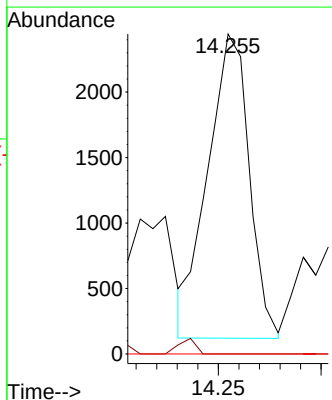
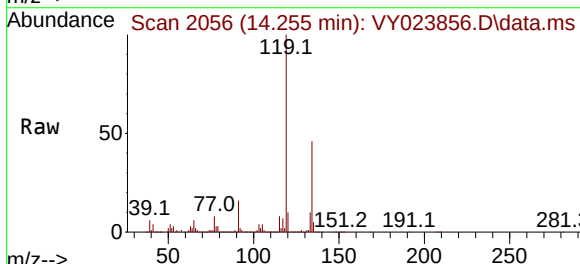
Instrument :
MSVOA_Y
ClientSampleId :

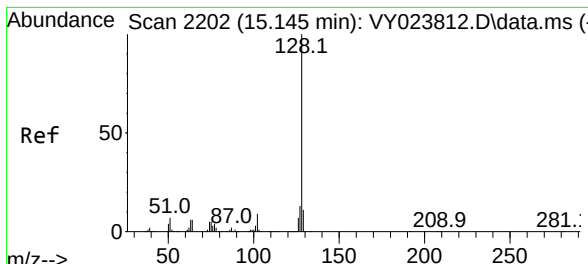
Tgt Ion:117 Resp: 35246
Ion Ratio Lower Upper
117 100
201 0.2 38.6 115.8#



#92
1,2-Dibromo-3-Chloropropane
Concen: 7.162 ug/l
RT: 14.255 min Scan# 2056
Delta R.T. -0.018 min
Lab File: VY023856.D
Acq: 02 Dec 2025 13:18

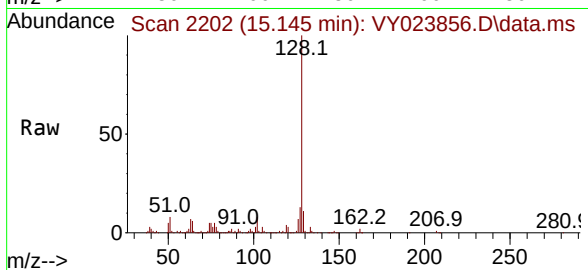
Tgt Ion: 75 Resp: 3255
Ion Ratio Lower Upper
75 100
155 0.0 44.0 132.1#
157 0.0 54.6 163.8#





#95
 Naphthalene
 Concen: 24.657 ug/l
 RT: 15.145 min Scan# 21
 Delta R.T. -0.000 min
 Lab File: VY023856.D
 Acq: 02 Dec 2025 13:18

Instrument :
 MSVOA_Y
 ClientSampleId :



Tgt Ion:128 Resp: 168556

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.2	15.2
129	11.6	8.8	13.2

