

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082225\
 Data File : VN087635.D
 Acq On : 22 Aug 2025 12:58
 Operator : JC\MD
 Sample : Q2920-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MW1

Quant Time: Aug 25 01:19:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N082125W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 22 02:55:42 2025
 Response via : Initial Calibration

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

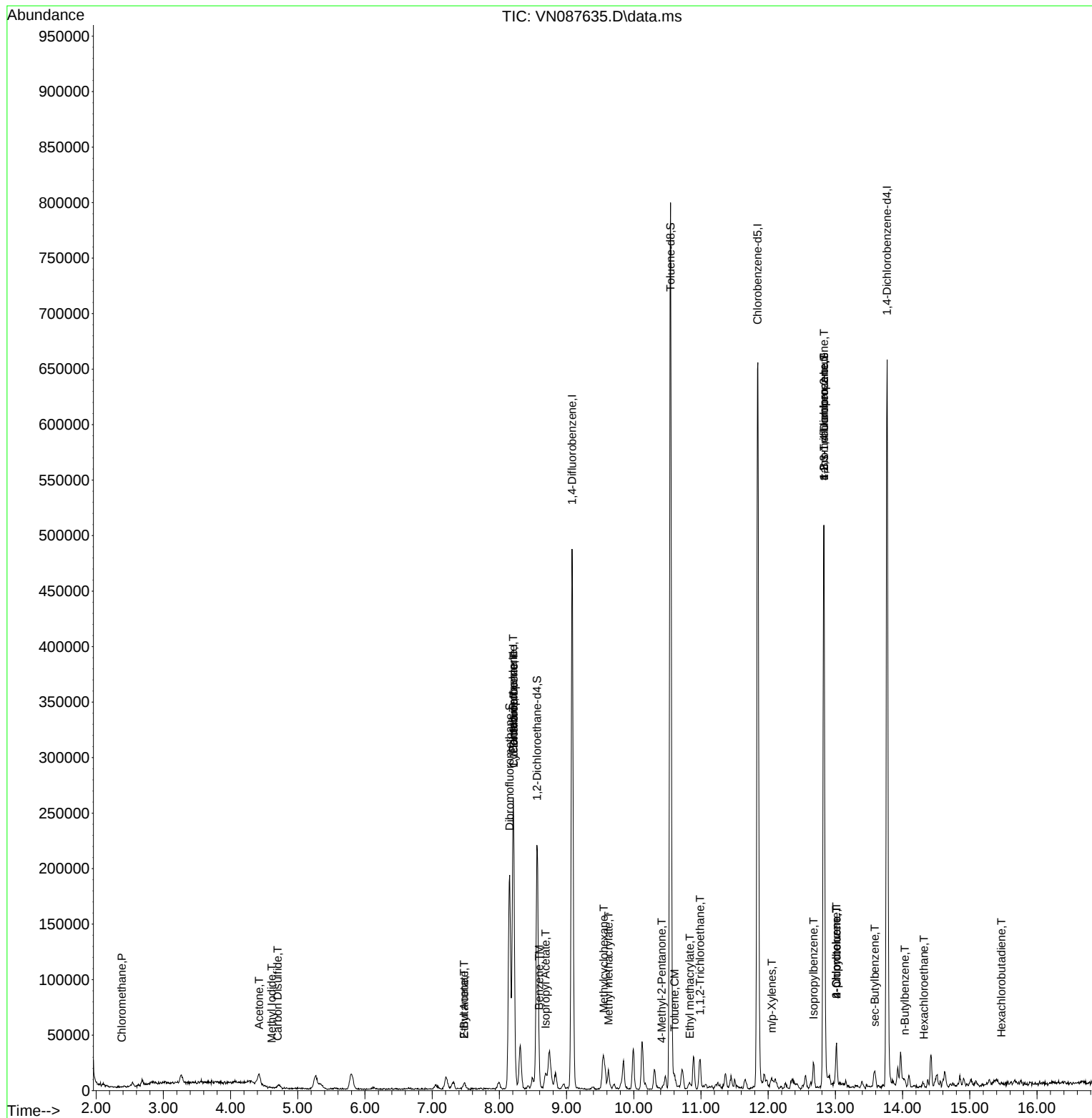
Internal Standards						
1) Pentafluorobenzene	8.206	168	170971	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	391923	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	359931	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	171098	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	185047	52.825	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 105.660%			
35) Dibromofluoromethane	8.153	113	138328	48.885	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 97.760%			
50) Toluene-d8	10.547	98	510948	48.244	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 96.480%			
62) 4-Bromofluorobenzene	12.829	95	177441	47.111	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 94.220%			
Target Compounds						Qvalue
3) Chloromethane	2.383	50	735	0.295	ug/l #	85
10) Methyl Iodide	4.612	142	59	6.839	ug/l #	38
16) Acetone	4.424	43	10581	5.549	ug/l	100
17) Carbon Disulfide	4.700	76	3538	0.521	ug/l #	74
20) Methylene Chloride	5.277	84	257	Below Cal	#	51
25) 2-Butanone	7.477	43	5508	2.195	ug/l #	86
31) Cyclohexane	8.212	56	8547	1.940	ug/l #	33
36) 1,1-Dichloropropene	8.212	75	16881	3.889	ug/l #	54
37) Ethyl Acetate	7.477	43	5508	0.929	ug/l #	72
38) Carbon Tetrachloride	8.206	117	21297	4.969	ug/l #	15
39) Methylcyclohexane	9.553	83	7043	1.474	ug/l #	56
40) Benzene	8.594	78	3893	0.292	ug/l	92
43) Isopropyl Acetate	8.688	43	7530	0.813	ug/l #	58
48) Methyl methacrylate	9.624	41	5173	1.181	ug/l #	21
51) 4-Methyl-2-Pentanone	10.418	43	1226	0.219	ug/l #	38
52) Toluene	10.606	92	3946	0.478	ug/l	92
55) 1,1,2-Trichloroethane	10.988	97	8632	2.703	ug/l #	24
56) Ethyl methacrylate	10.835	69	1508	0.296	ug/l	92
68) m/p-Xylenes	12.053	106	2456	0.432	ug/l #	70
73) Isopropylbenzene	12.676	105	13885	1.004	ug/l	92
76) 1,2,3-Trichloropropane	12.829	75	105014	26.173	ug/l #	1
78) n-propylbenzene	13.017	91	27993	1.644	ug/l	94
79) 2-Chlorotoluene	13.017	91	27993	2.731	ug/l #	42
81) trans-1,4-Dichloro-2-b...	12.829	75	105014	69.289	ug/l #	1
82) 4-Chlorotoluene	13.017	91	27993	2.598	ug/l #	43
85) sec-Butylbenzene	13.588	105	7166	0.494	ug/l #	59
89) n-Butylbenzene	14.035	91	4246	0.357	ug/l #	78
90) Hexachloroethane	14.317	117	467	0.205	ug/l #	22
94) Hexachlorobutadiene	15.470	225	433	0.332	ug/l #	30

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

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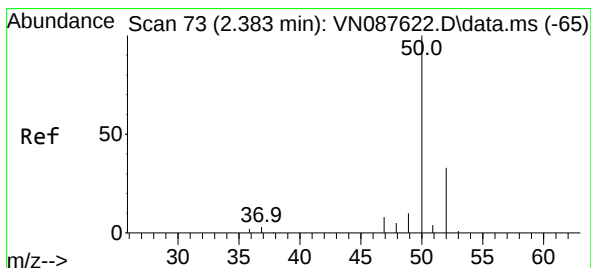
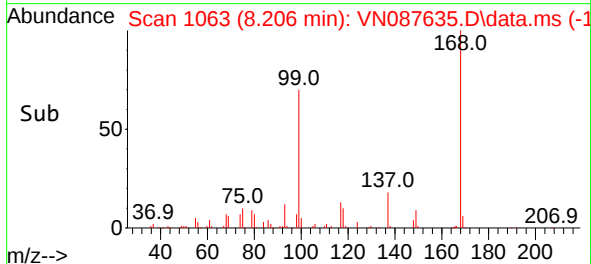
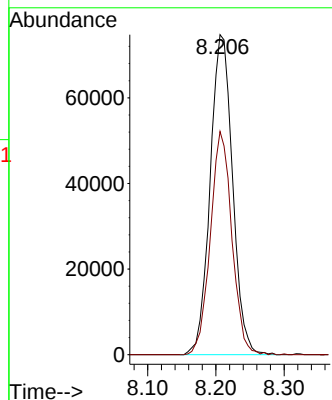
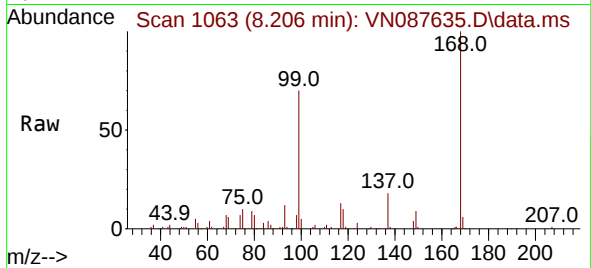




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

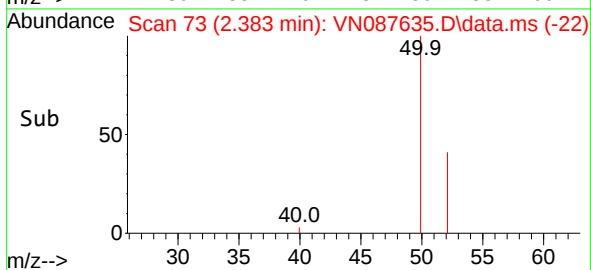
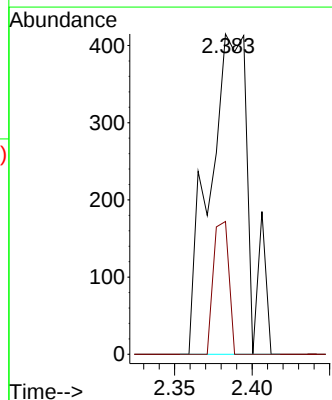
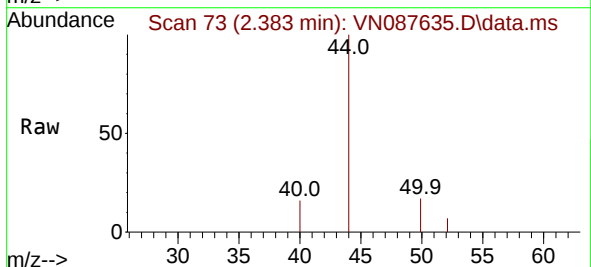
Instrument :
MSVOA_N
ClientSampleId :
MW1

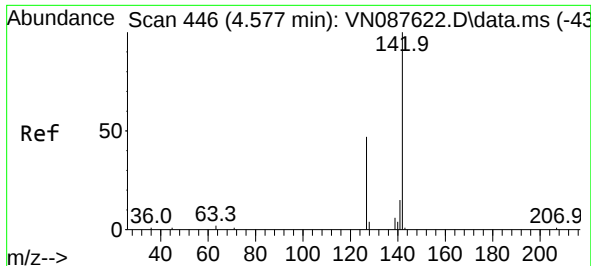
Tgt Ion:168 Resp: 170971
Ion Ratio Lower Upper
168 100
99 69.8 57.2 85.8



#3
Chloromethane
Concen: 0.295 ug/l
RT: 2.383 min Scan# 73
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 50 Resp: 735
Ion Ratio Lower Upper
50 100
52 41.4 26.2 39.4#

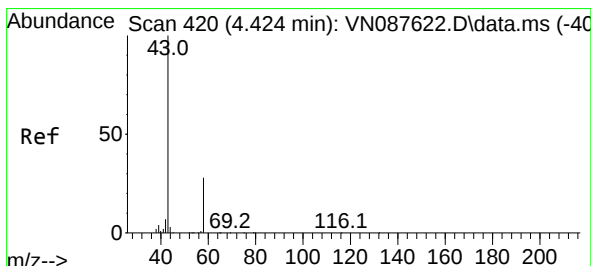
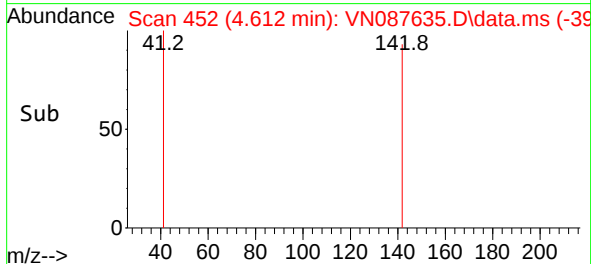
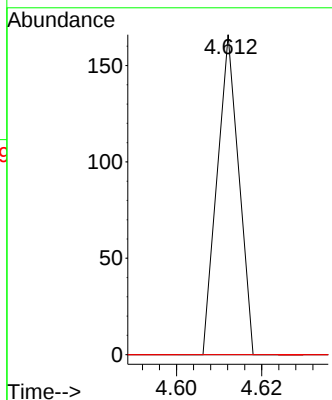
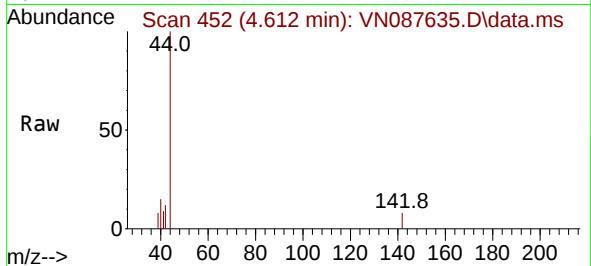




#10
Methyl Iodide
Concen: 6.839 ug/l
RT: 4.612 min Scan# 41
Delta R.T. 0.035 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

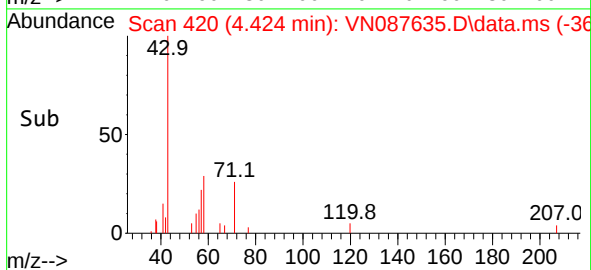
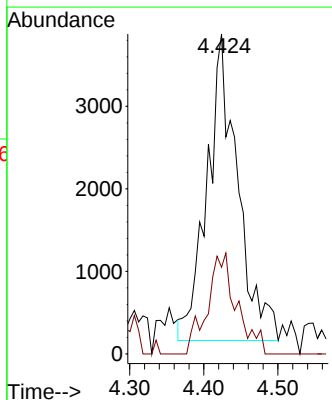
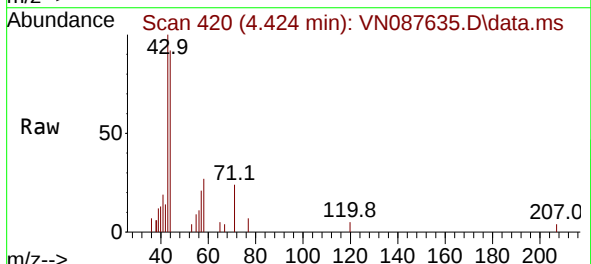
Instrument :
MSVOA_N
ClientSampleId :
MW1

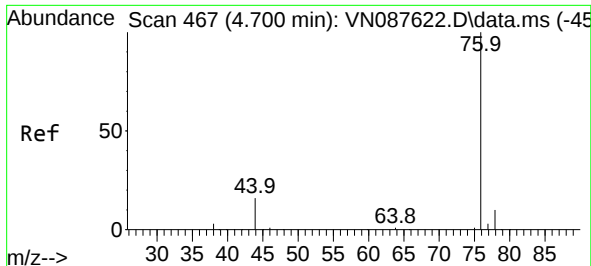
Tgt Ion:142 Resp: 59
Ion Ratio Lower Upper
142 100
127 0.0 38.0 57.0#
141 0.0 12.0 18.0#



#16
Acetone
Concen: 5.549 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 43 Resp: 10581
Ion Ratio Lower Upper
43 100
58 28.3 22.6 33.8





#17

Carbon Disulfide

Concen: 0.521 ug/l

RT: 4.700 min Scan# 4

Delta R.T. -0.000 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

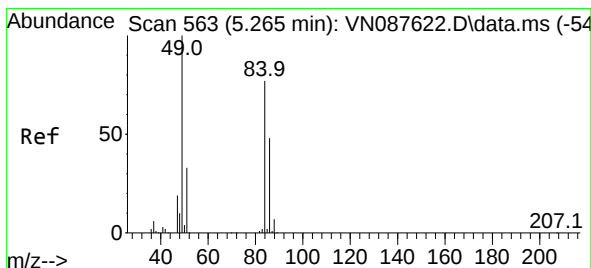
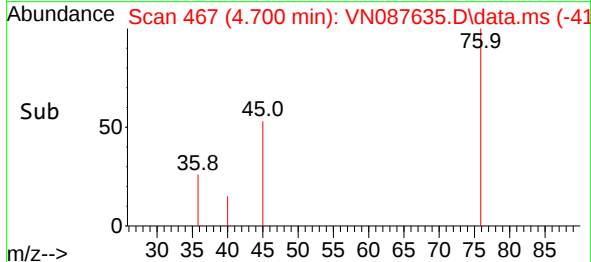
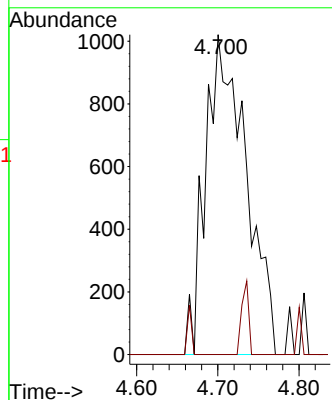
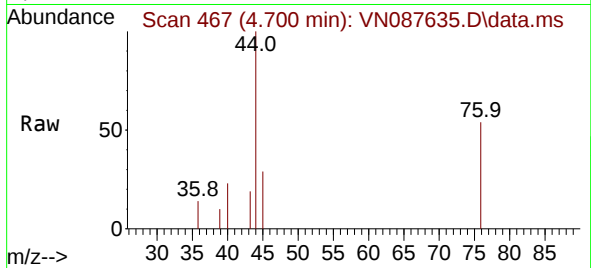
MW1

Tgt Ion: 76 Resp: 3538

Ion Ratio Lower Upper

76 100

78 0.0 7.6 11.4#



#20

Methylene Chloride

Concen: Below Cal

RT: 5.277 min Scan# 565

Delta R.T. 0.012 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Tgt Ion: 84 Resp: 257

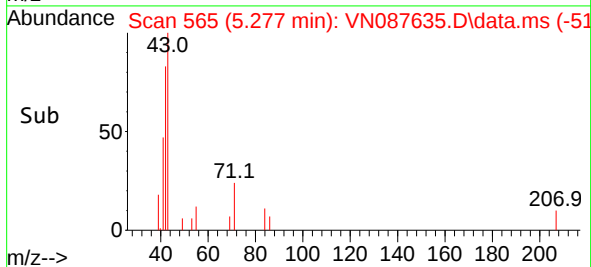
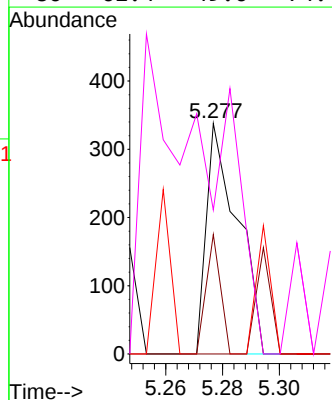
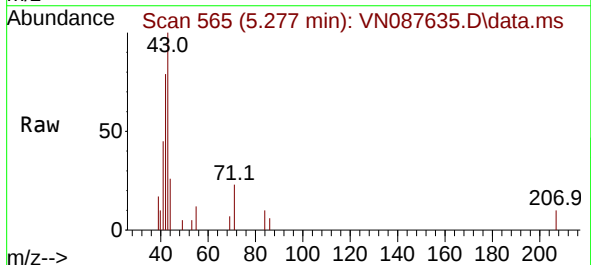
Ion Ratio Lower Upper

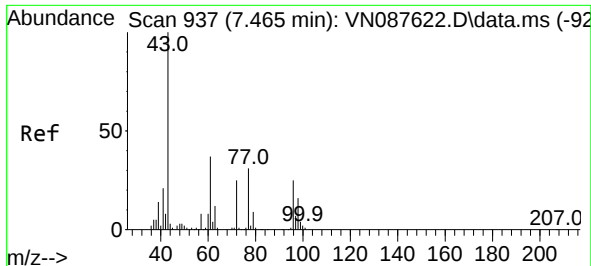
84 100

49 51.8 103.4 155.2#

51 0.0 33.8 50.8#

86 62.4 49.6 74.4

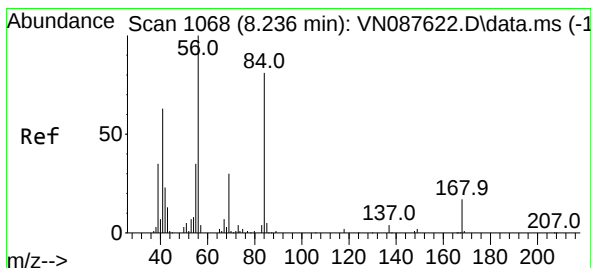
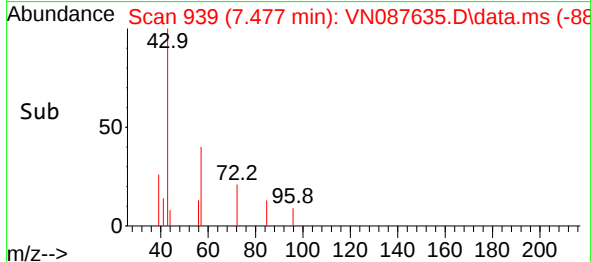
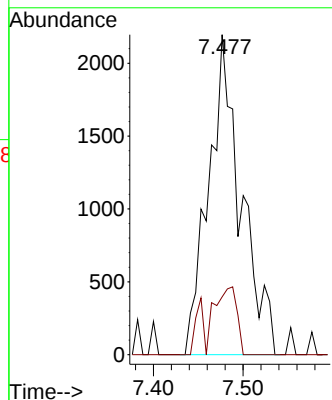
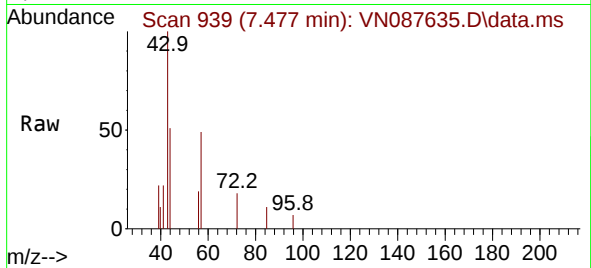




#25
2-Butanone
Concen: 2.195 ug/l
RT: 7.477 min Scan# 91
Delta R.T. 0.012 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

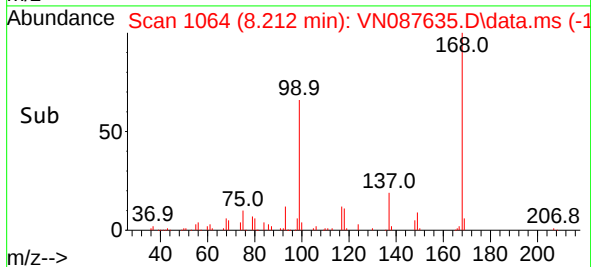
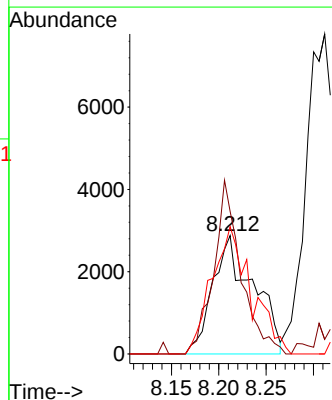
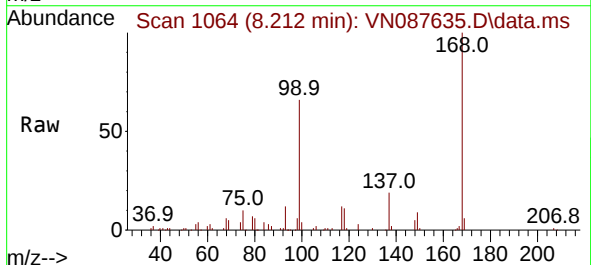
Instrument :
MSVOA_N
ClientSampleId :
MW1

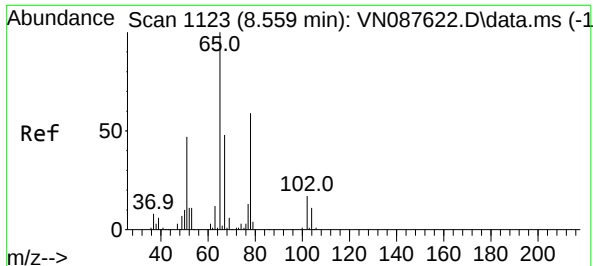
Tgt Ion: 43 Resp: 5508
Ion Ratio Lower Upper
43 100
72 18.0 19.9 29.9#



#31
Cyclohexane
Concen: 1.940 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. -0.024 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 56 Resp: 8547
Ion Ratio Lower Upper
56 100
69 120.4 23.7 35.5#
84 107.6 64.7 97.1#





#33

1,2-Dichloroethane-d4

Concen: 52.825 ug/l

RT: 8.559 min Scan# 1123

Delta R.T. -0.000 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

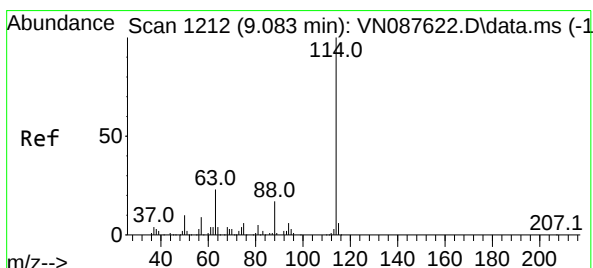
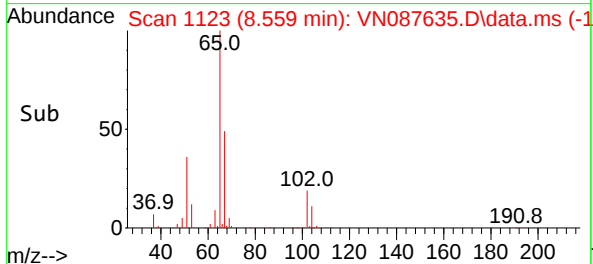
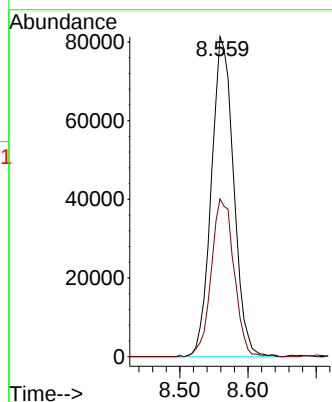
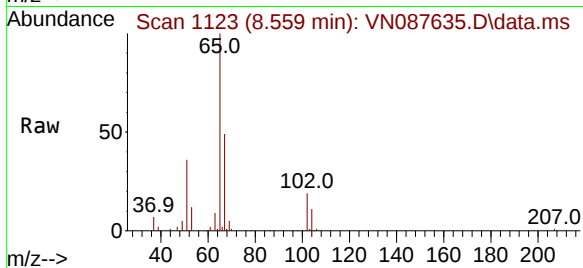
MW1

Tgt Ion: 65 Resp: 185047

Ion Ratio Lower Upper

65 100

67 50.6 0.0 100.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.082 min Scan# 1212

Delta R.T. -0.000 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

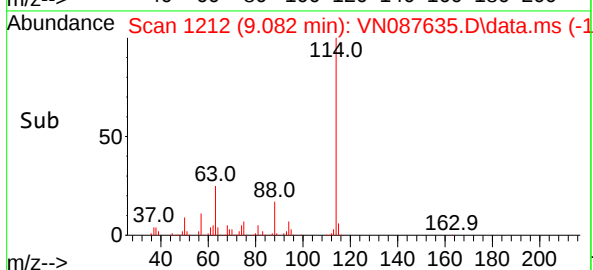
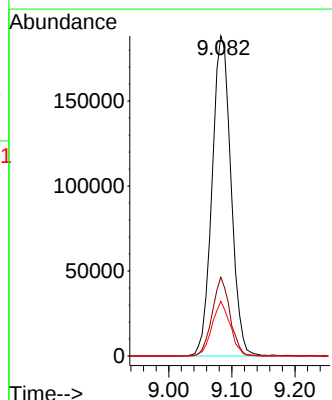
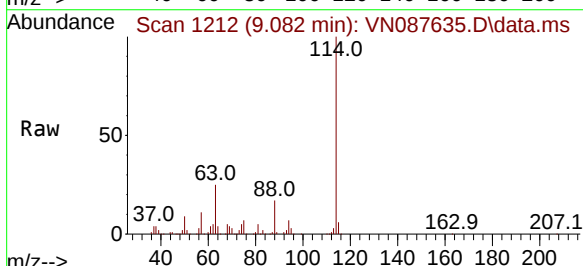
Tgt Ion: 114 Resp: 391923

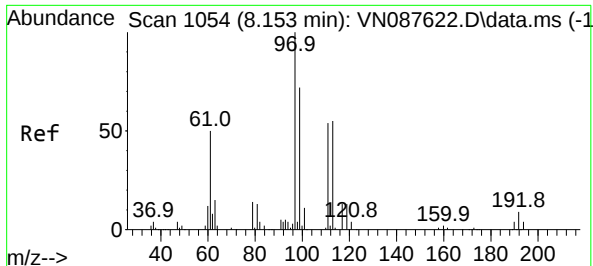
Ion Ratio Lower Upper

114 100

63 24.6 0.0 45.2

88 17.0 0.0 33.4





#35

Dibromofluoromethane

Concen: 48.885 ug/l

RT: 8.153 min Scan# 1054

Delta R.T. -0.000 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

MW1

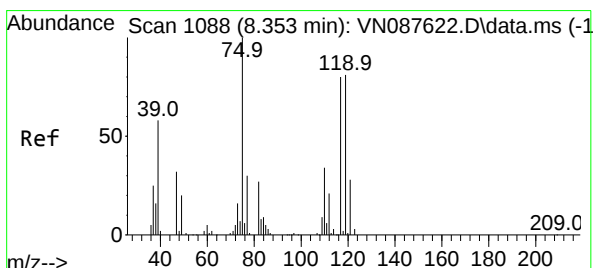
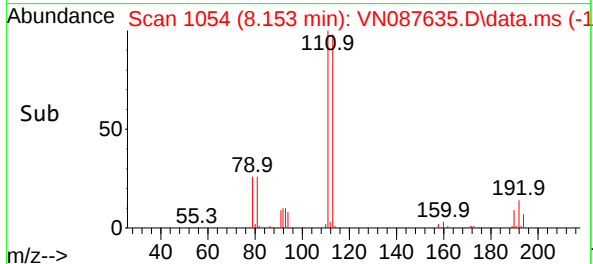
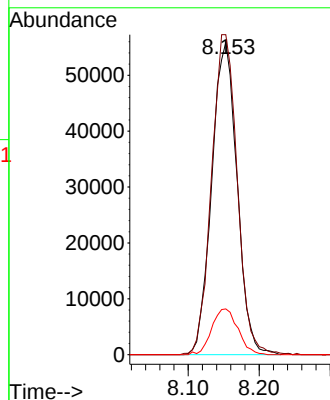
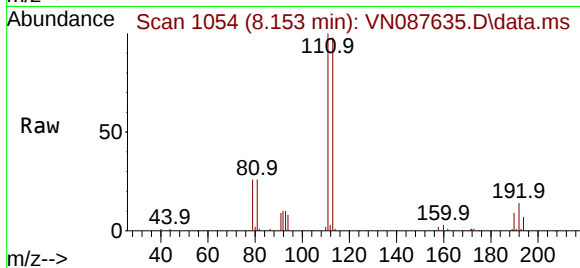
Tgt Ion:113 Resp: 138328

Ion Ratio Lower Upper

113 100

111 103.7 82.8 124.2

192 15.2 12.8 19.2



#36

1,1-Dichloropropene

Concen: 3.889 ug/l

RT: 8.212 min Scan# 1064

Delta R.T. -0.141 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

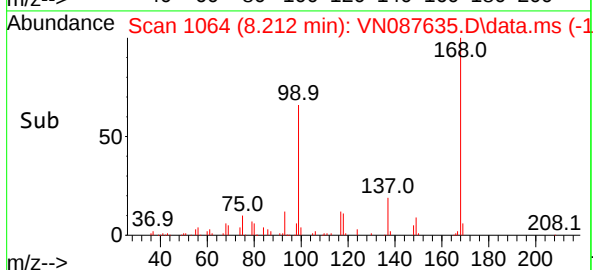
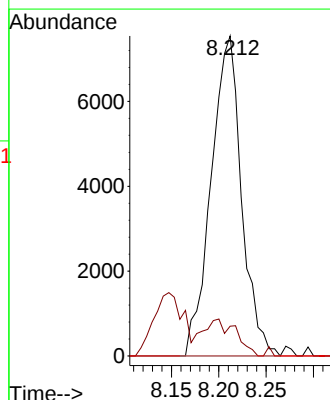
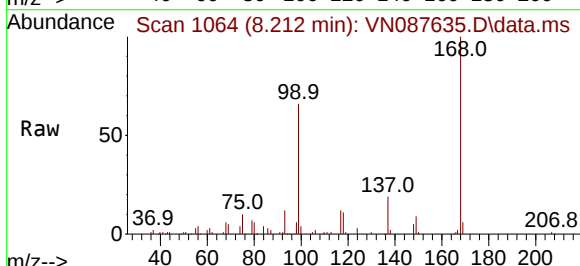
Tgt Ion: 75 Resp: 16881

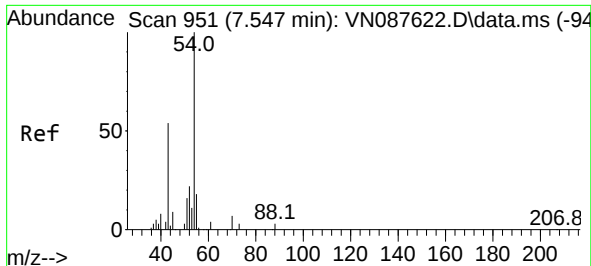
Ion Ratio Lower Upper

75 100

110 11.7 15.9 47.6#

77 0.0 24.4 36.6#





#37

Ethyl Acetate

Concen: 0.929 ug/l

RT: 7.477 min Scan# 91

Delta R.T. -0.071 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

MW1

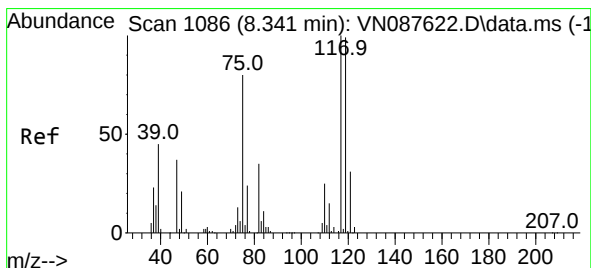
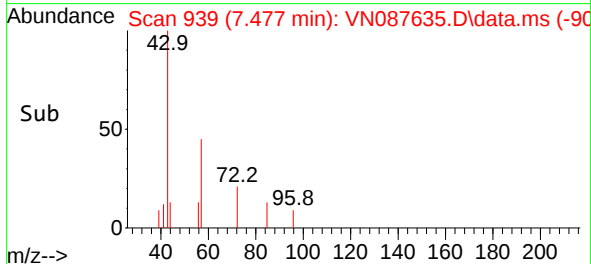
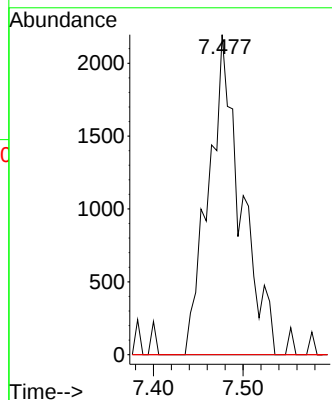
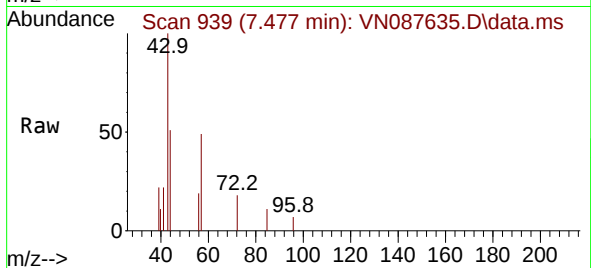
Tgt Ion: 43 Resp: 5508

Ion Ratio Lower Upper

43 100

61 0.0 9.3 13.9#

70 0.0 7.0 10.6#



#38

Carbon Tetrachloride

Concen: 4.969 ug/l

RT: 8.206 min Scan# 1063

Delta R.T. -0.135 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

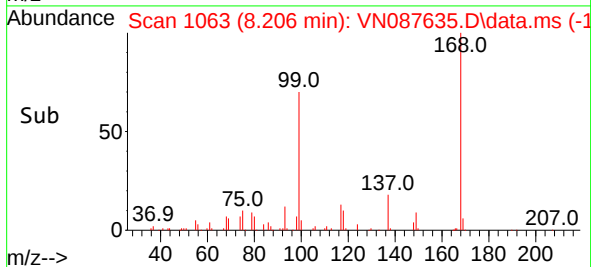
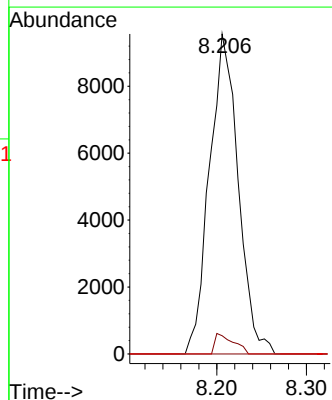
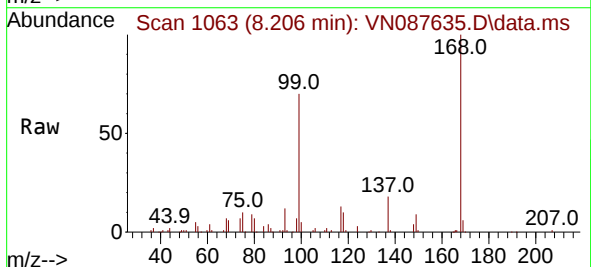
Tgt Ion: 117 Resp: 21297

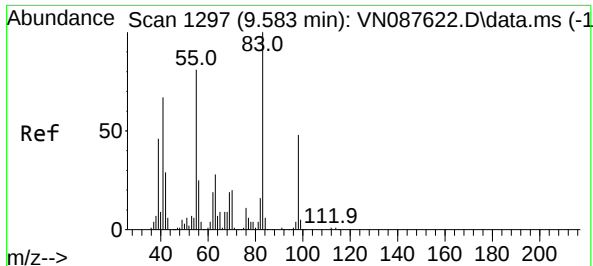
Ion Ratio Lower Upper

117 100

119 5.7 79.0 118.6#

121 0.0 25.0 37.6#





#39

Methylcyclohexane

Concen: 1.474 ug/l

RT: 9.553 min Scan# 1129

Delta R.T. -0.030 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

MW1

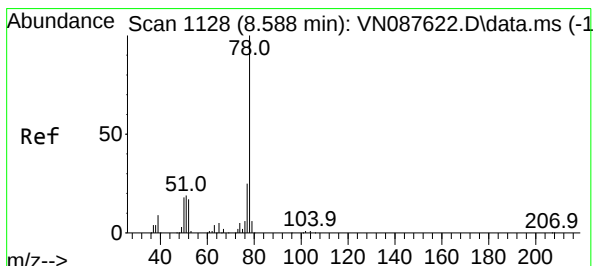
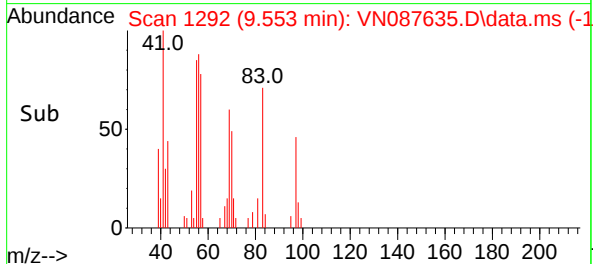
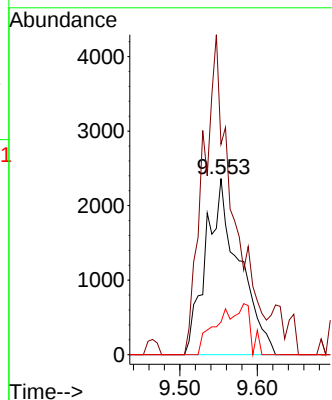
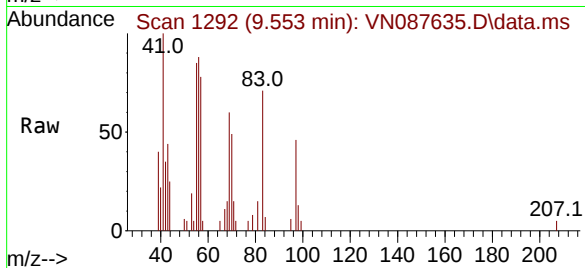
Tgt Ion: 83 Resp: 7043

Ion Ratio Lower Upper

83 100

55 119.5 64.6 96.8#

98 18.5 38.4 57.6#



#40

Benzene

Concen: 0.292 ug/l

RT: 8.594 min Scan# 1129

Delta R.T. 0.006 min

Lab File: VN087635.D

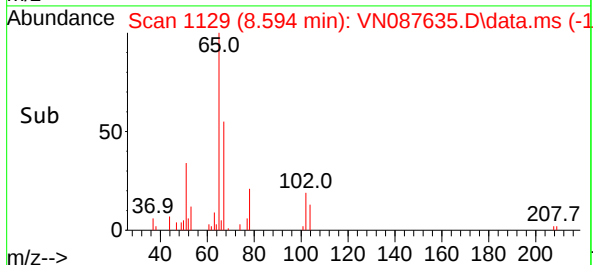
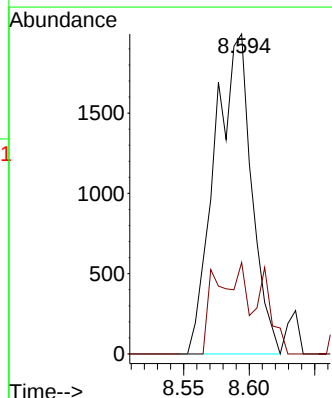
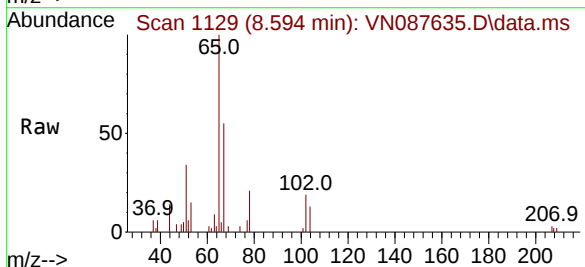
Acq: 22 Aug 2025 12:58

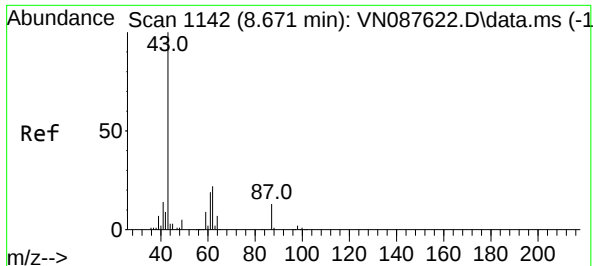
Tgt Ion: 78 Resp: 3893

Ion Ratio Lower Upper

78 100

77 28.6 19.7 29.5

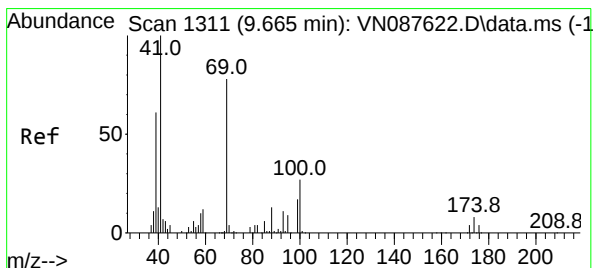
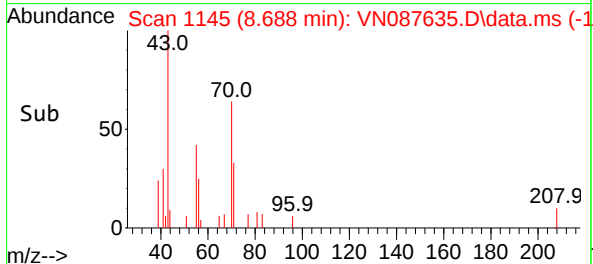
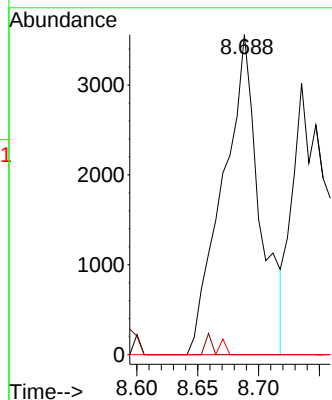
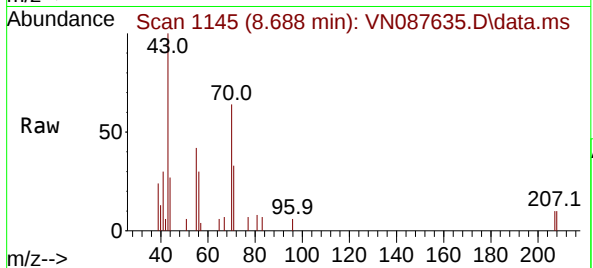




#43
Isopropyl Acetate
Concen: 0.813 ug/l
RT: 8.688 min Scan# 1145
Delta R.T. 0.017 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

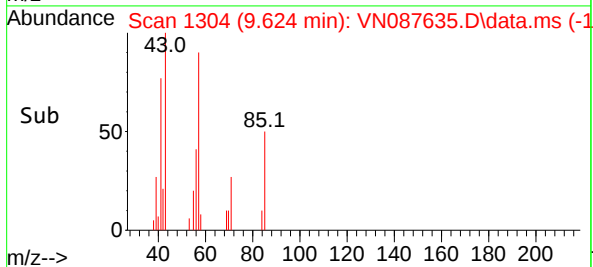
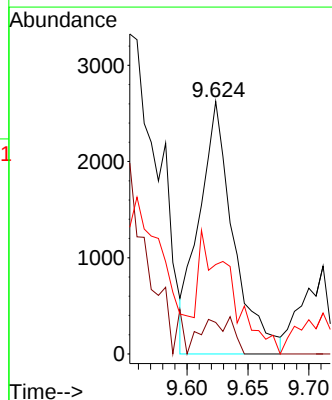
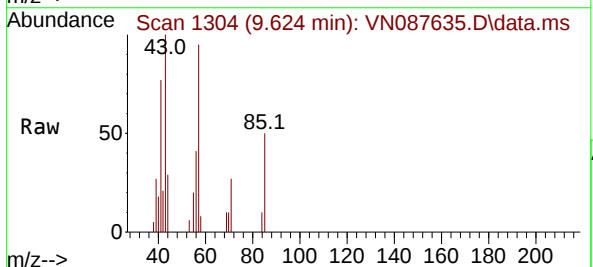
Instrument :
MSVOA_N
ClientSampleId :
MW1

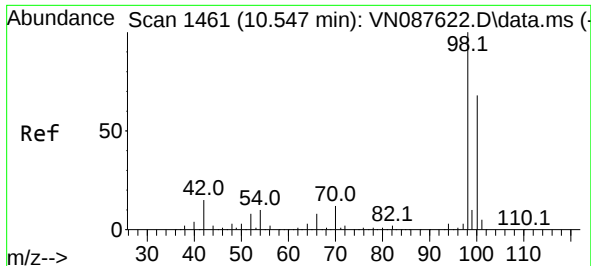
Tgt Ion: 43 Resp: 7530
Ion Ratio Lower Upper
43 100
61 0.0 18.8 28.2#
87 0.8 9.6 14.4#



#48
Methyl methacrylate
Concen: 1.181 ug/l
RT: 9.624 min Scan# 1304
Delta R.T. -0.041 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 41 Resp: 5173
Ion Ratio Lower Upper
41 100
69 13.0 62.7 94.1#
39 0.0 52.9 79.3#

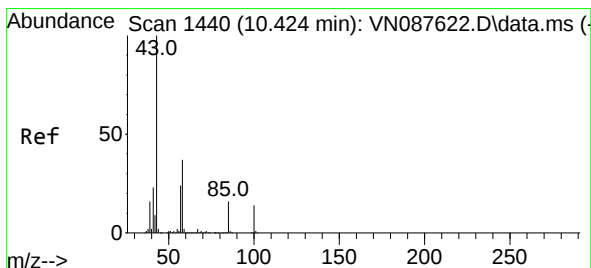
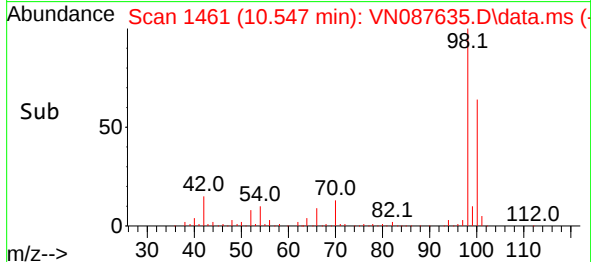
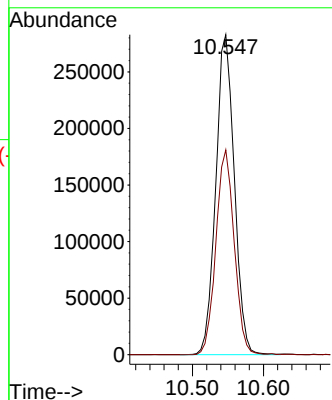
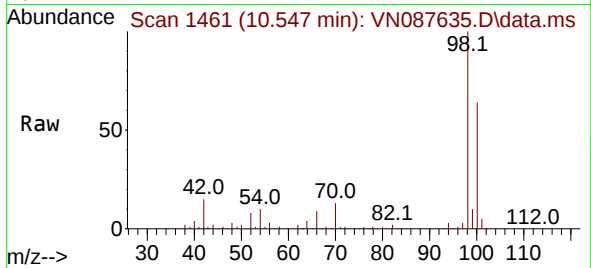




#50
Toluene-d8
Concen: 48.244 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

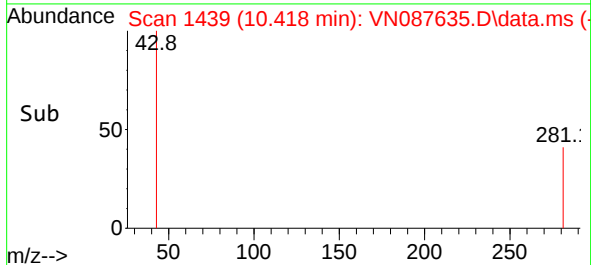
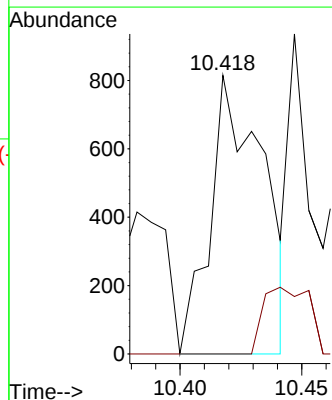
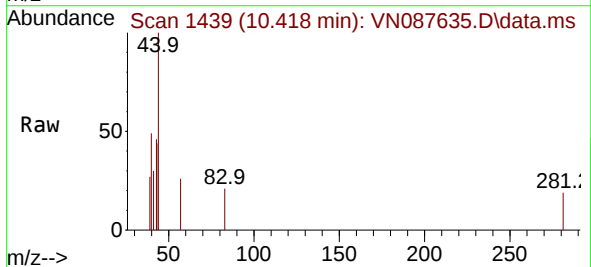
Instrument :
MSVOA_N
ClientSampleId :
MW1

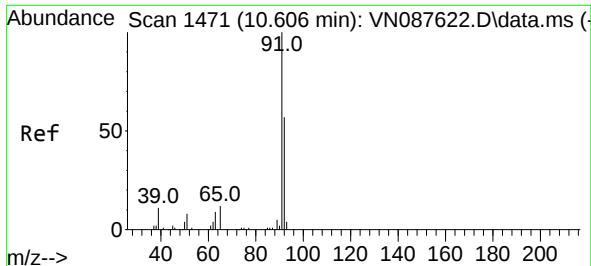
Tgt Ion: 98 Resp: 510948
Ion Ratio Lower Upper
98 100
100 63.3 52.8 79.2



#51
4-Methyl-2-Pentanone
Concen: 0.219 ug/l
RT: 10.418 min Scan# 1439
Delta R.T. -0.006 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 43 Resp: 1226
Ion Ratio Lower Upper
43 100
58 0.0 29.6 44.4#

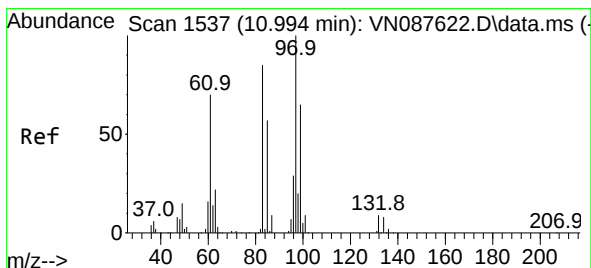
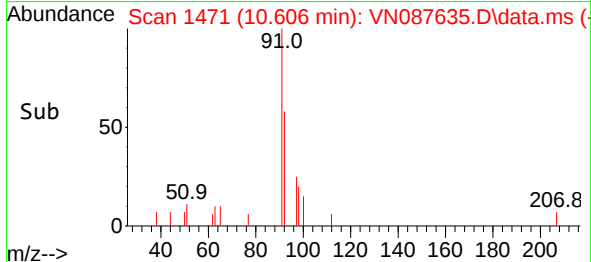
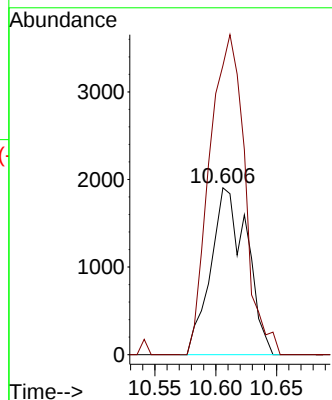
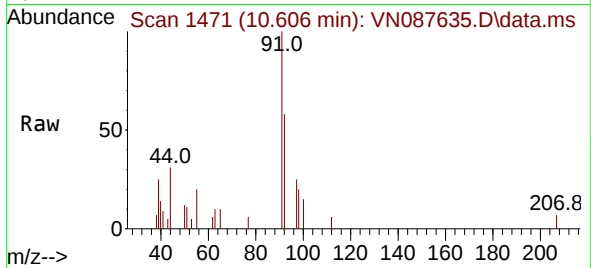




#52
Toluene
Concen: 0.478 ug/l
RT: 10.606 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

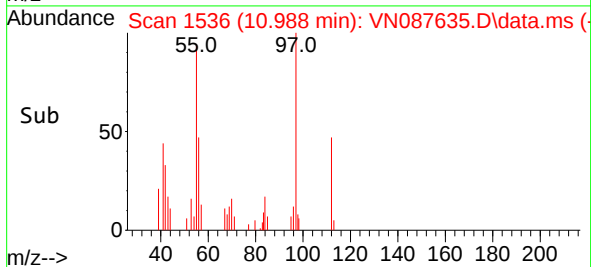
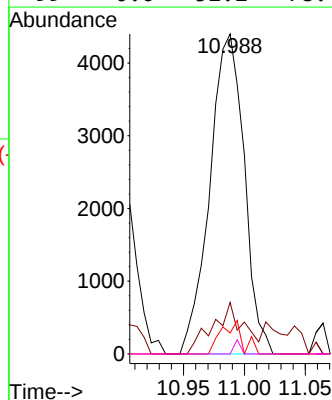
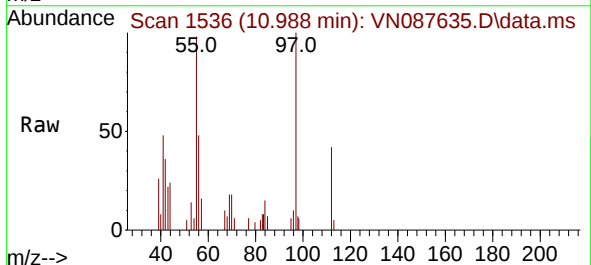
Instrument :
MSVOA_N
ClientSampleId :
MW1

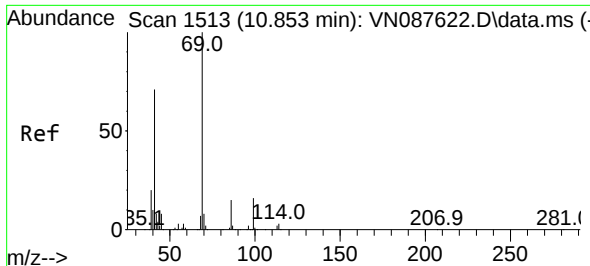
Tgt Ion: 92 Resp: 3946
Ion Ratio Lower Upper
92 100
91 186.0 140.4 210.6



#55
1,1,2-Trichloroethane
Concen: 2.703 ug/l
RT: 10.988 min Scan# 1536
Delta R.T. -0.006 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 97 Resp: 8632
Ion Ratio Lower Upper
97 100
83 16.1 68.2 102.4#
85 6.6 45.5 68.3#
99 0.0 52.2 78.4#

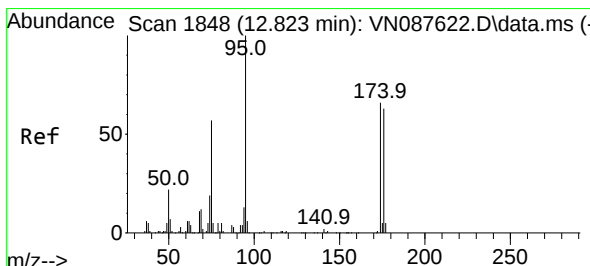
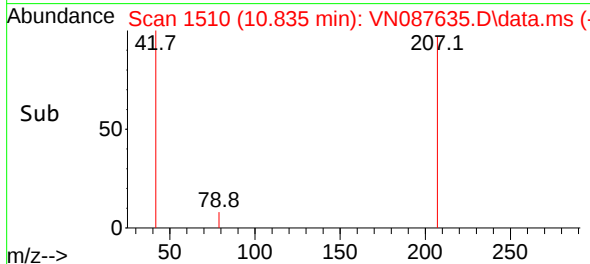
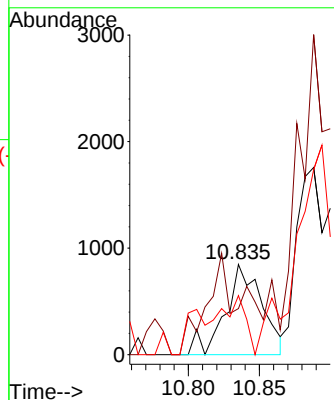
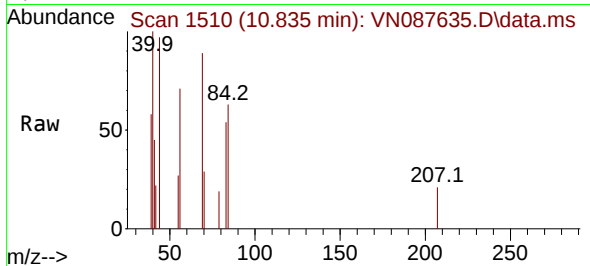




#56
Ethyl methacrylate
Concen: 0.296 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. -0.018 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

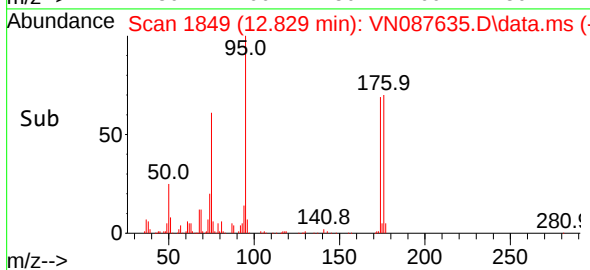
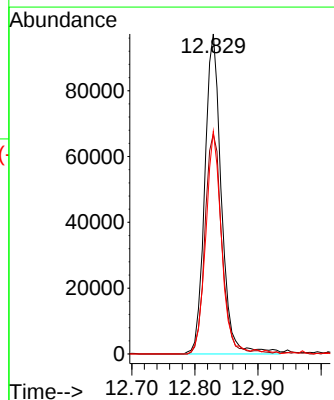
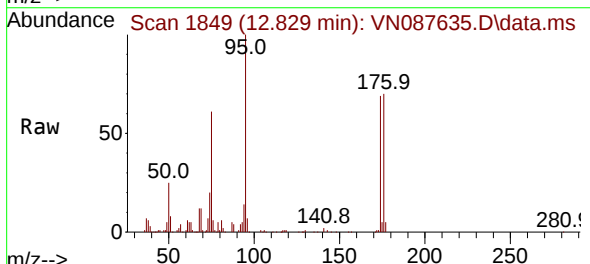
Instrument :
MSVOA_N
ClientSampleId :
MW1

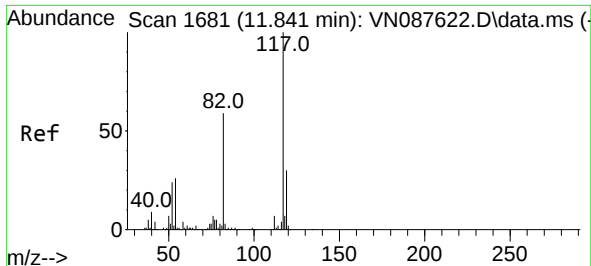
Tgt Ion:	69	Resp:	1508
Ion	Ratio	Lower	Upper
69	100		
41	78.2	56.5	84.7
39	39.1	34.2	51.4



#62
4-Bromofluorobenzene
Concen: 47.111 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.006 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion:	95	Resp:	177441
Ion	Ratio	Lower	Upper
95	100		
174	69.4	0.0	138.4
176	65.9	0.0	132.6

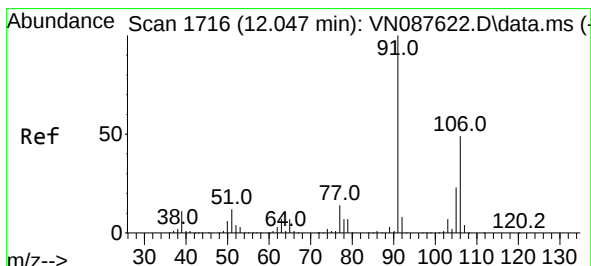
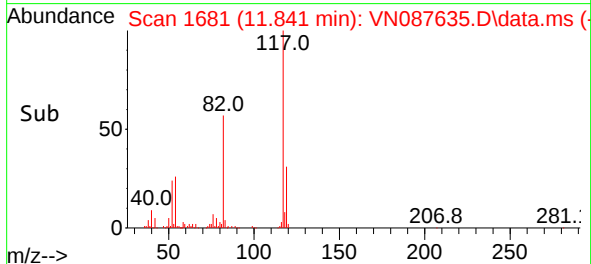
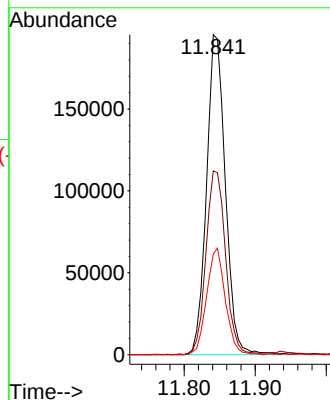
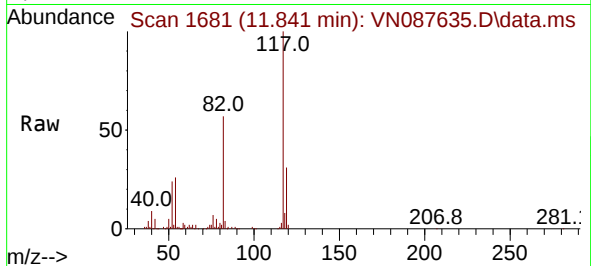




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 117
Delta R.T. -0.000 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

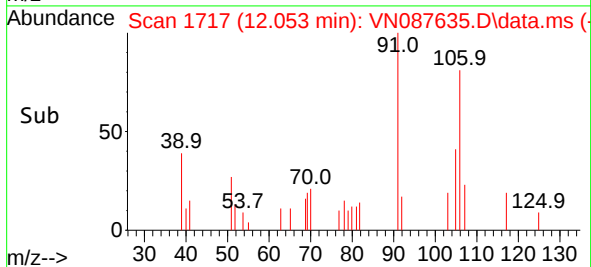
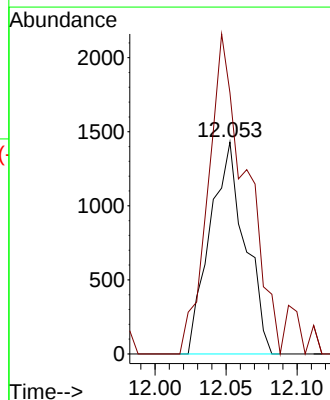
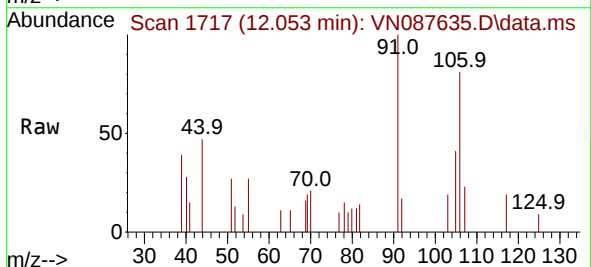
Instrument :
MSVOA_N
ClientSampleId :
MW1

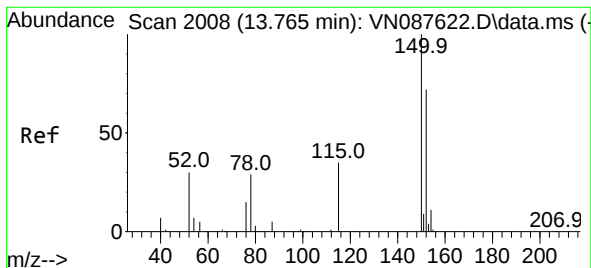
Tgt Ion:117 Resp: 359931
Ion Ratio Lower Upper
117 100
82 57.2 47.4 71.2
119 31.5 24.3 36.5



#68
m/p-Xylenes
Concen: 0.432 ug/l
RT: 12.053 min Scan# 1717
Delta R.T. 0.006 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion:106 Resp: 2456
Ion Ratio Lower Upper
106 100
91 164.0 169.3 253.9#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 2008

Delta R.T. 0.006 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

MW1

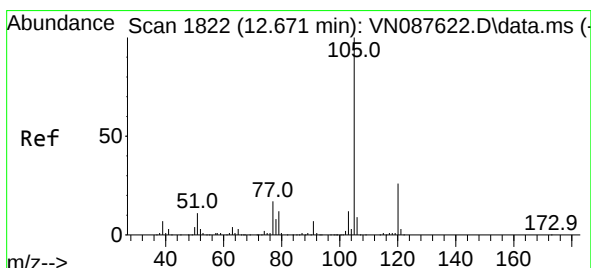
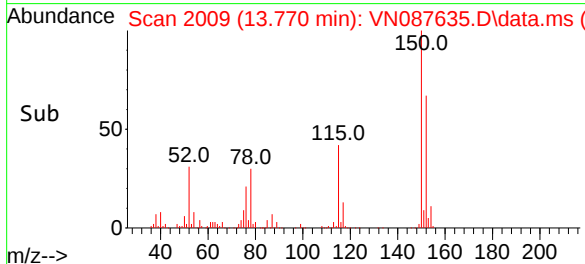
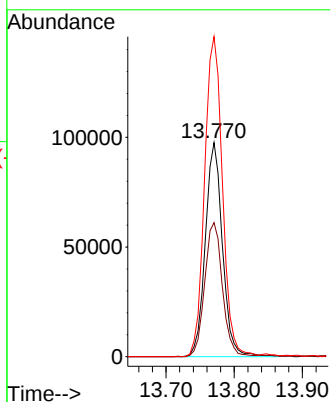
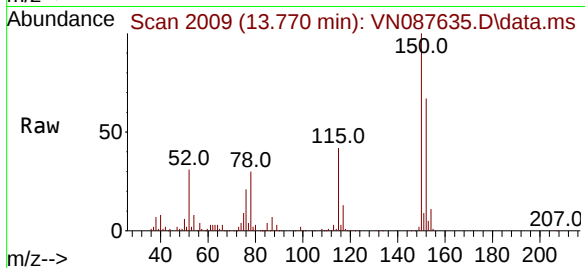
Tgt Ion:152 Resp: 171098

Ion Ratio Lower Upper

152 100

115 64.7 32.3 96.8

150 155.2 0.0 351.0



#73

Isopropylbenzene

Concen: 1.004 ug/l

RT: 12.676 min Scan# 1823

Delta R.T. 0.006 min

Lab File: VN087635.D

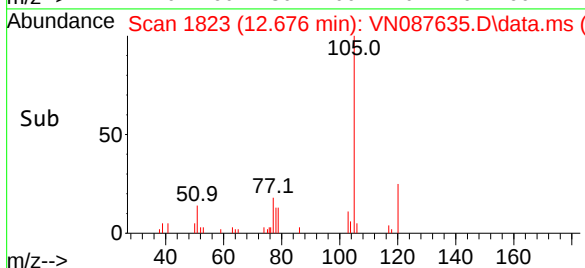
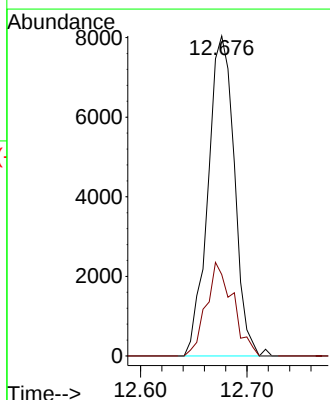
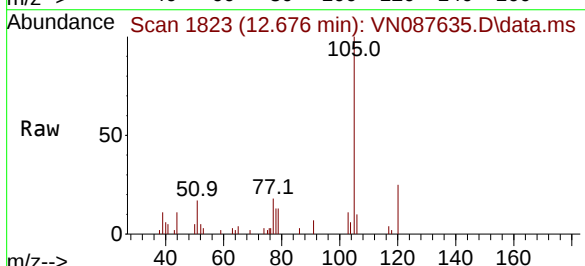
Acq: 22 Aug 2025 12:58

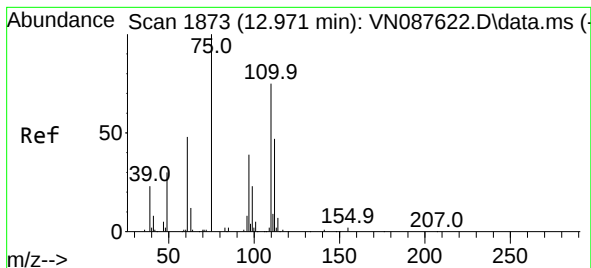
Tgt Ion:105 Resp: 13885

Ion Ratio Lower Upper

105 100

120 29.6 12.8 38.3





#76

1,2,3-Trichloropropane

Concen: 26.173 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. -0.141 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

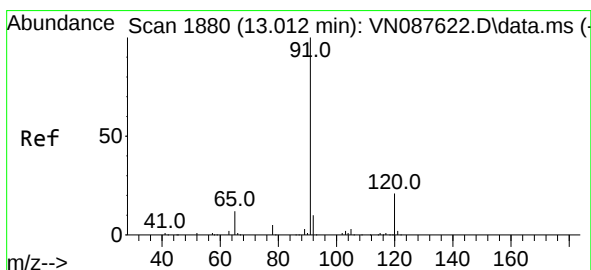
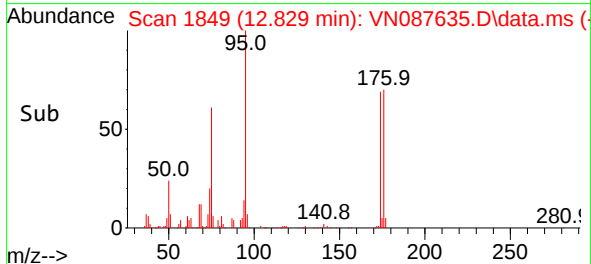
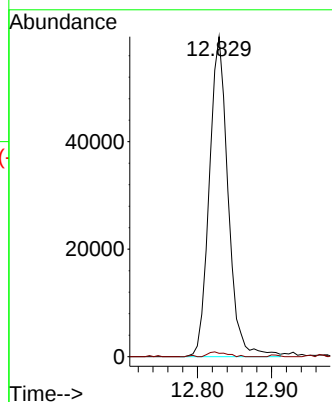
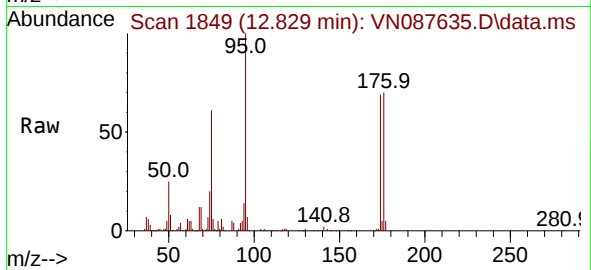
MW1

Tgt Ion: 75 Resp: 105014

Ion Ratio Lower Upper

75 100

77 1.5 89.1 267.4#



#78

n-propylbenzene

Concen: 1.644 ug/l

RT: 13.017 min Scan# 1881

Delta R.T. 0.006 min

Lab File: VN087635.D

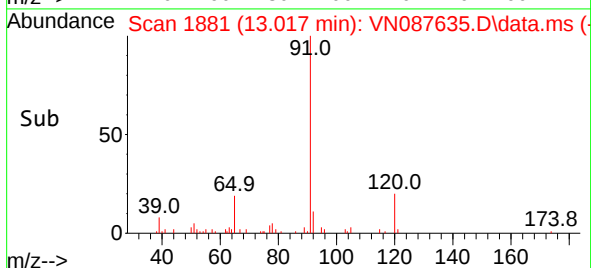
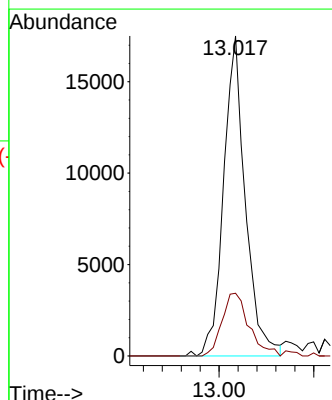
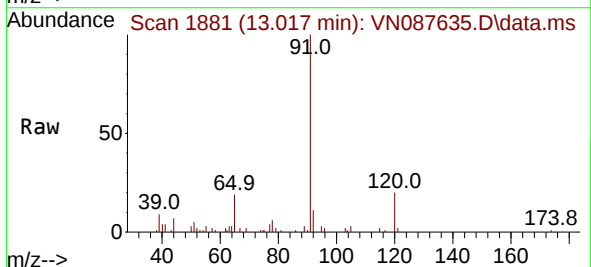
Acq: 22 Aug 2025 12:58

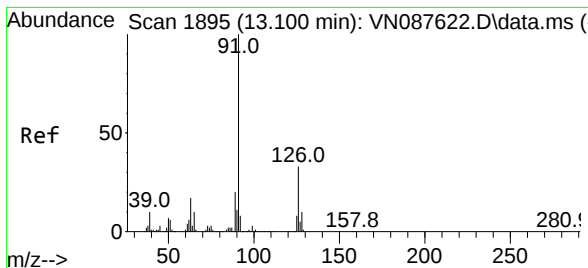
Tgt Ion: 91 Resp: 27993

Ion Ratio Lower Upper

91 100

120 24.2 10.7 32.1

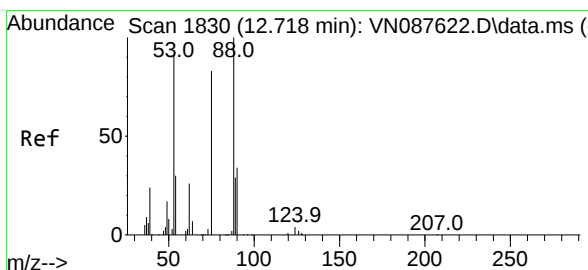
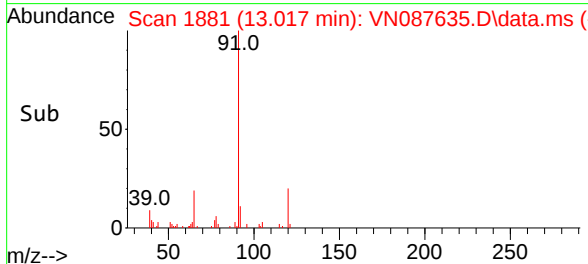
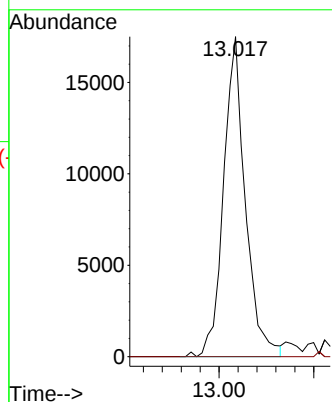
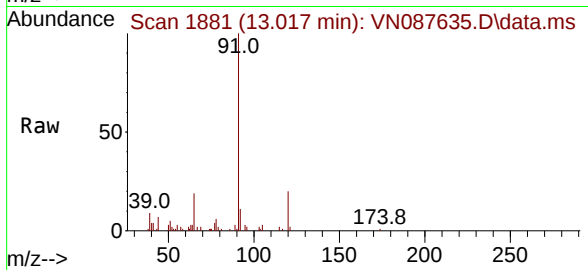




#79
2-Chlorotoluene
Concen: 2.731 ug/l
RT: 13.017 min Scan# 1881
Delta R.T. -0.083 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

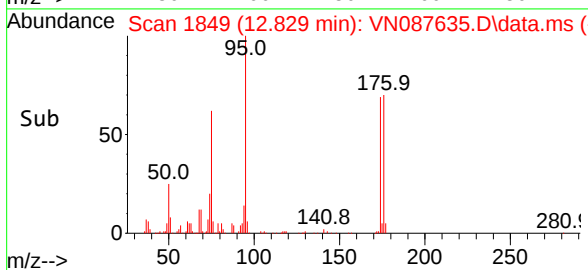
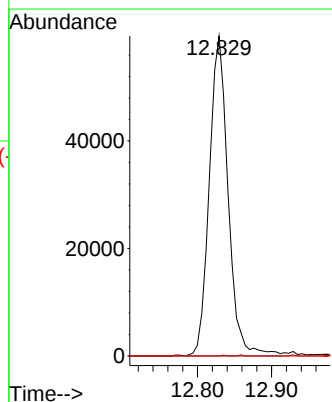
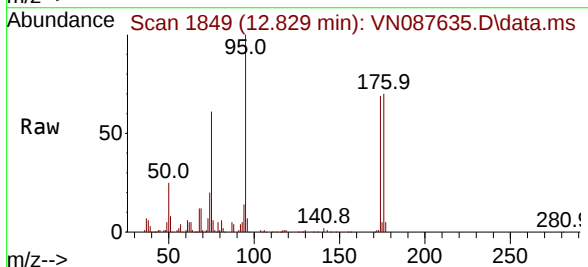
Instrument : MSVOA_N
ClientSampleId : MW1

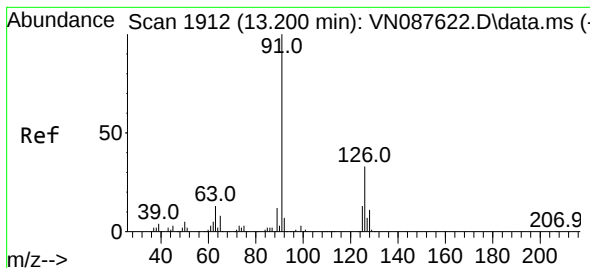
Tgt Ion: 91 Resp: 27993
Ion Ratio Lower Upper
91 100
126 0.0 16.1 48.3#



#81
trans-1,4-Dichloro-2-butene
Concen: 69.289 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.112 min
Lab File: VN087635.D
Acq: 22 Aug 2025 12:58

Tgt Ion: 75 Resp: 105014
Ion Ratio Lower Upper
75 100
53 0.1 101.8 152.6#
89 0.0 35.6 53.4#





#82

4-Chlorotoluene

Concen: 2.598 ug/l

RT: 13.017 min Scan# 1912

Delta R.T. -0.183 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

Instrument :

MSVOA_N

ClientSampleId :

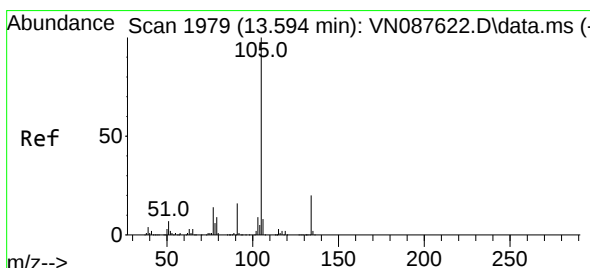
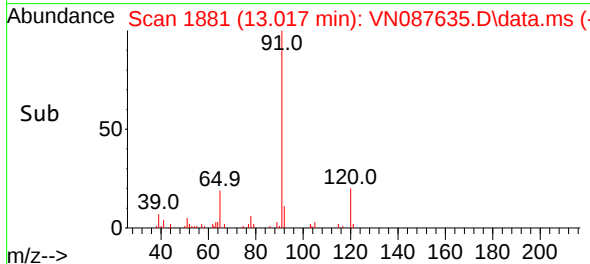
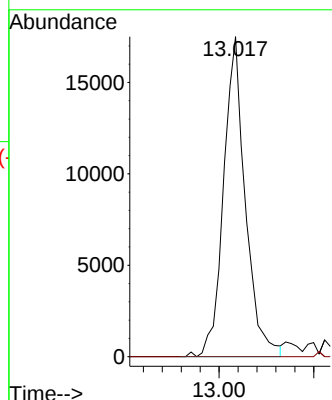
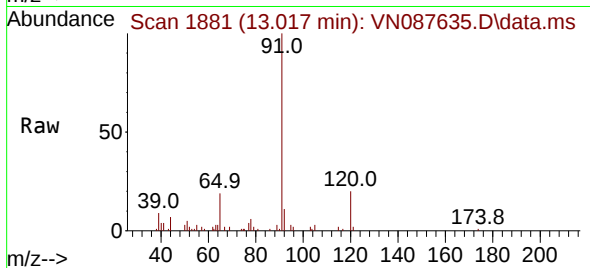
MW1

Tgt Ion: 91 Resp: 27993

Ion Ratio Lower Upper

91 100

126 0.0 15.6 46.8#



#85

sec-Butylbenzene

Concen: 0.494 ug/l

RT: 13.588 min Scan# 1978

Delta R.T. -0.006 min

Lab File: VN087635.D

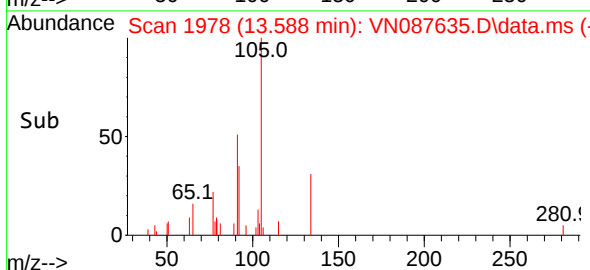
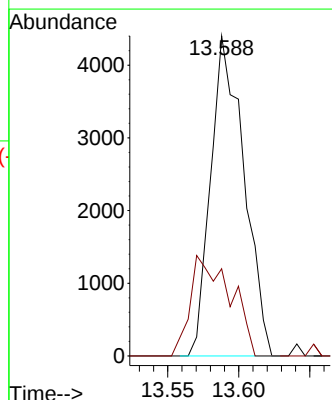
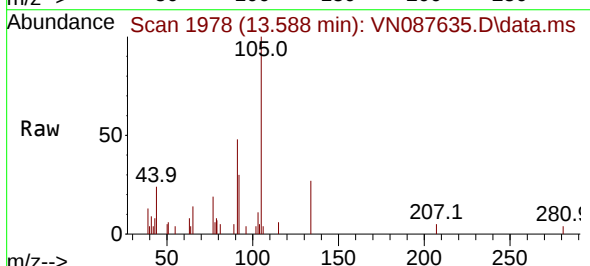
Acq: 22 Aug 2025 12:58

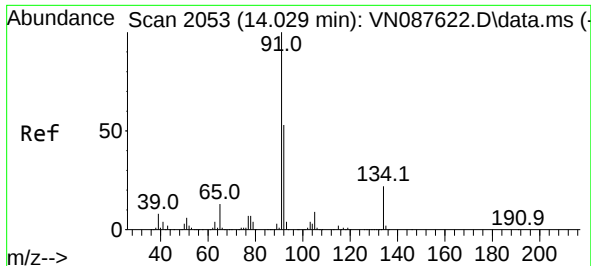
Tgt Ion: 105 Resp: 7166

Ion Ratio Lower Upper

105 100

134 37.7 9.6 28.6#





#89

n-Butylbenzene

Concen: 0.357 ug/l

RT: 14.035 min Scan# 2053

Delta R.T. 0.006 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

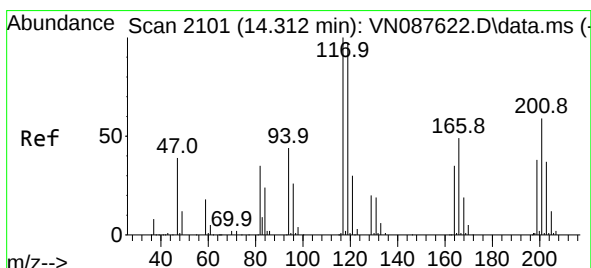
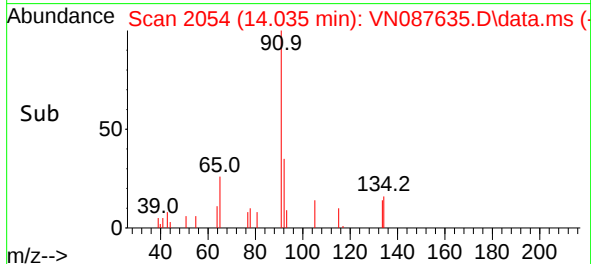
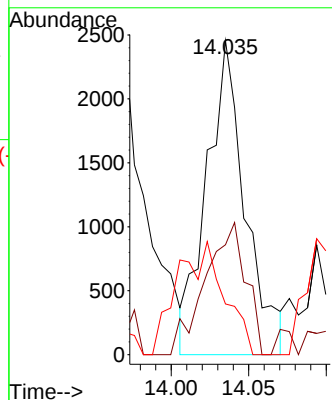
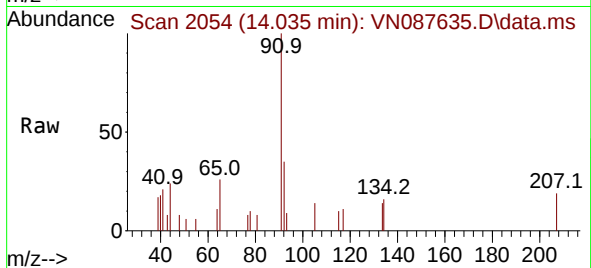
Instrument :

MSVOA_N

ClientSampleId :

MW1

Tgt Ion: 91	Resp:	4246
Ion Ratio	Lower	Upper
91	100	
92	44.3	25.9 77.8
134	0.0	11.7 35.0#



#90

Hexachloroethane

Concen: 0.205 ug/l

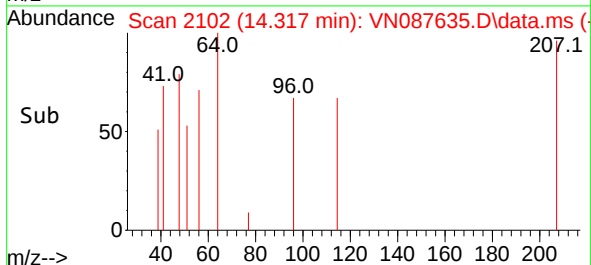
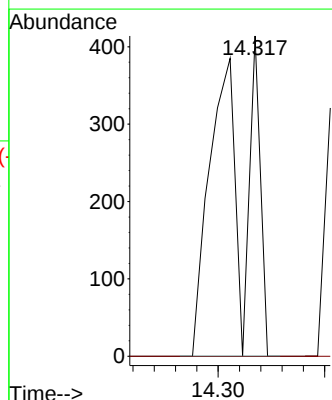
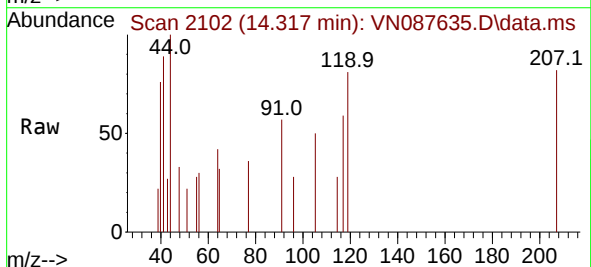
RT: 14.317 min Scan# 2102

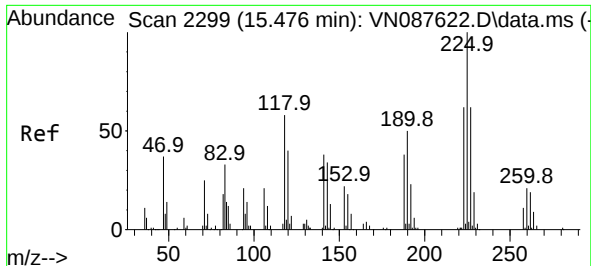
Delta R.T. 0.006 min

Lab File: VN087635.D

Acq: 22 Aug 2025 12:58

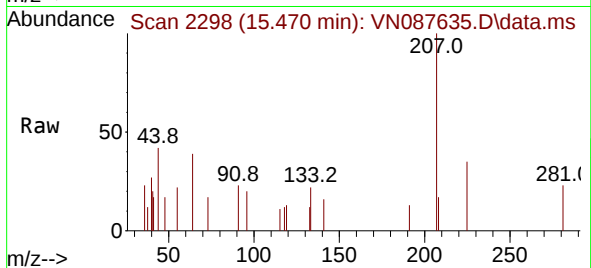
Tgt Ion: 117	Resp:	467
Ion Ratio	Lower	Upper
117	100	
201	0.0	29.1 87.4#





#94
 Hexachlorobutadiene
 Concen: 0.332 ug/l
 RT: 15.470 min Scan# 21
 Delta R.T. -0.006 min
 Lab File: VN087635.D
 Acq: 22 Aug 2025 12:58

Instrument :
 MSVOA_N
 ClientSampleId :
 MW1



Tgt Ion:	225	Resp:	433
Ion	Ratio	Lower	Upper
225	100		
223	0.0	32.0	96.2#
227	18.5	32.1	96.5#

