

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100825\
 Data File : VN088039.D
 Acq On : 08 Oct 2025 14:20
 Operator : JC\MD
 Sample : VN1009WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1008WBL01

Quant Time: Oct 09 02:55:27 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N100825W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Oct 09 02:36:32 2025
 Response via : Initial Calibration

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

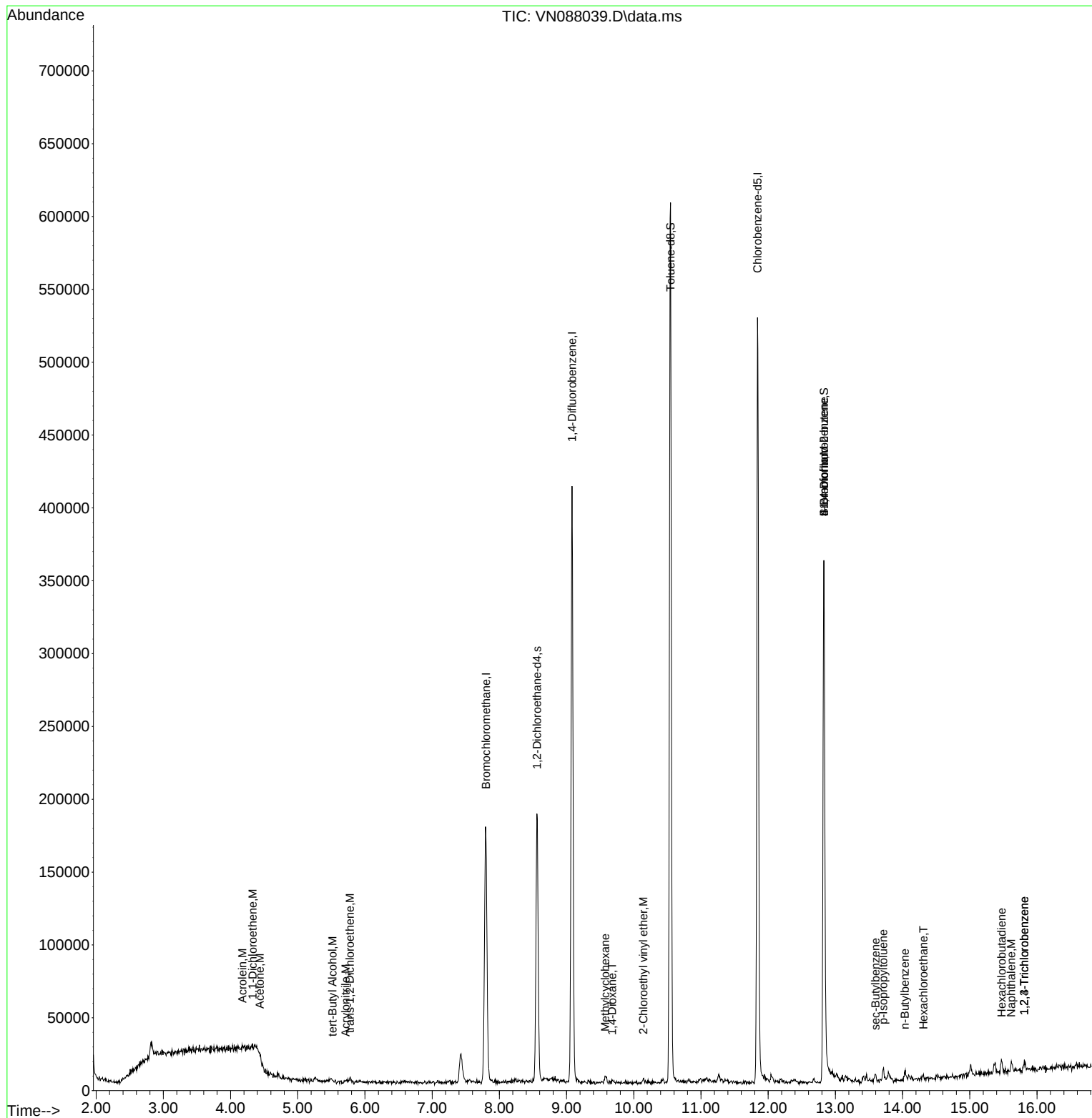
Internal Standards						
1) Bromochloromethane	7.800	128	61923	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.083	114	352790	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.841	117	309337	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.559	65	148932	30.887	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 102.967%	
60) 4-Bromofluorobenzene	12.829	95	141230	27.694	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 92.300%	
63) Toluene-d8	10.547	98	426437	30.941	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 103.133%	
Target Compounds						
						Qvalue
10) 1,1-Dichloroethene	4.330	96	1023	0.314	ug/l #	20
13) Acrolein	4.177	56	307	0.375	ug/l #	99
14) Acrylonitrile	5.712	53	864	0.338	ug/l	79
15) Acetone	4.436	58	376	0.503	ug/l #	6
19) trans-1,2-Dichloroethene	5.777	96	1006	0.267	ug/l #	37
23) tert-Butyl Alcohol	5.518	59	1402	1.369	ug/l #	100
38) Methylcyclohexane	9.577	83	1984	0.318	ug/l #	56
45) 1,4-Dioxane	9.677	88	171	2.196	ug/l #	34
55) 2-Chloroethyl vinyl ether	10.141	63	1114	0.301	ug/l #	93
56) Bromoform	12.829	173	1147	0.350	ug/l #	1
77) t-1,4-Dichloro-2-butene	12.829	75	75159	33.377	ug/l #	17
81) sec-Butylbenzene	13.600	105	4033	0.217	ug/l	100
82) p-Isopropyltoluene	13.712	119	3429	0.216	ug/l	89
85) n-Butylbenzene	14.035	91	3944	0.267	ug/l	98
86) Hexachloroethane	14.312	117	693	0.218	ug/l #	48
89) 1,2,4-Trichlorobenzene	15.811	180	1159	0.240	ug/l #	71
90) Hexachlorobutadiene	15.476	225	1756	1.043	ug/l	84
91) Naphthalene	15.617	128	5657	0.320	ug/l #	89
92) 1,2,3-Trichlorobenzene	15.811	180	1159	0.240	ug/l	71

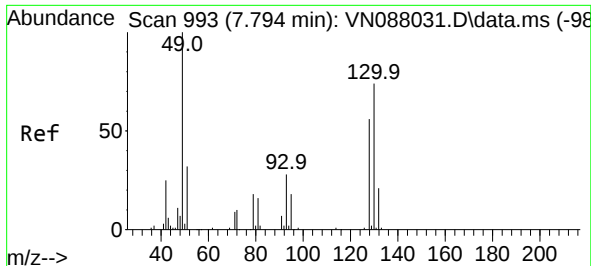
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100825\
Data File : VN088039.D
Acq On : 08 Oct 2025 14:20
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Sample : VN1009WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

Quant Time: Oct 09 02:55:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N100825W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Oct 09 02:36:32 2025
Response via : Initial Calibration

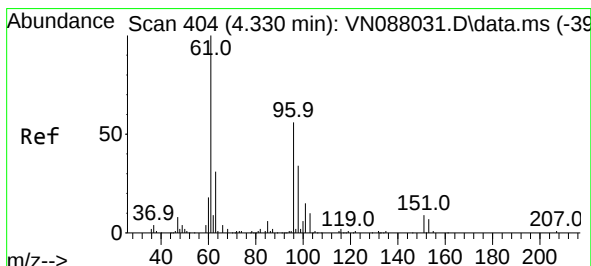
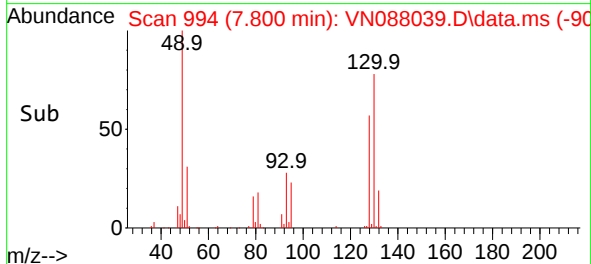
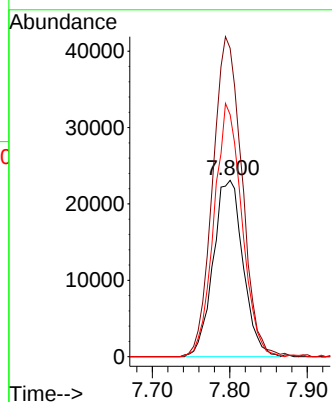
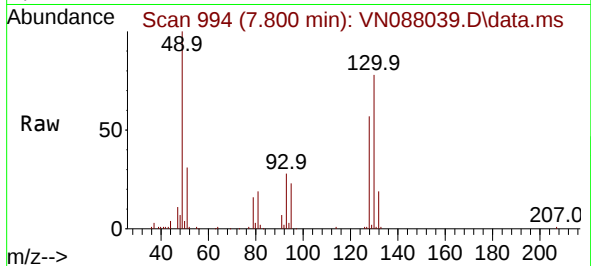




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.800 min Scan# 993
Delta R.T. 0.006 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

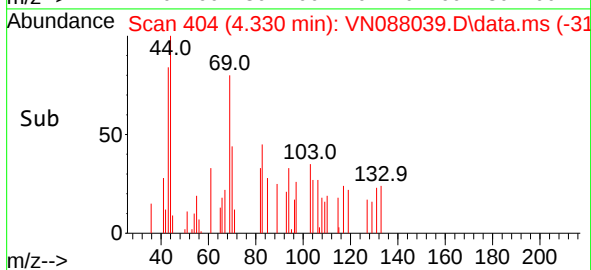
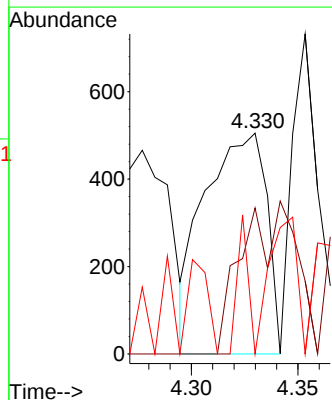
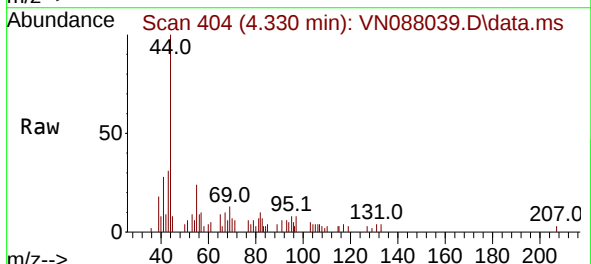
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

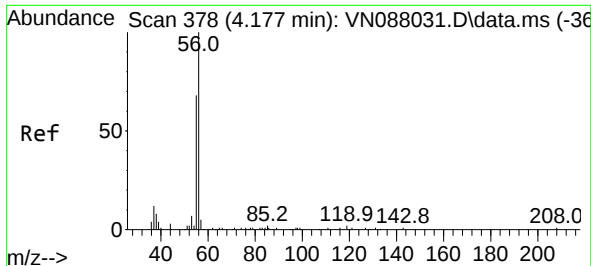
Tgt Ion:128 Resp: 61923
Ion Ratio Lower Upper
128 100
49 177.5 0.0 439.8
130 133.8 0.0 325.8



#10
1,1-Dichloroethene
Concen: 0.314 ug/l
RT: 4.330 min Scan# 404
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion: 96 Resp: 1023
Ion Ratio Lower Upper
96 100
61 66.1 144.1 216.1#
98 0.0 49.0 73.6#





#13

Acrolein

Concen: 0.375 ug/l

RT: 4.177 min Scan# 31

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

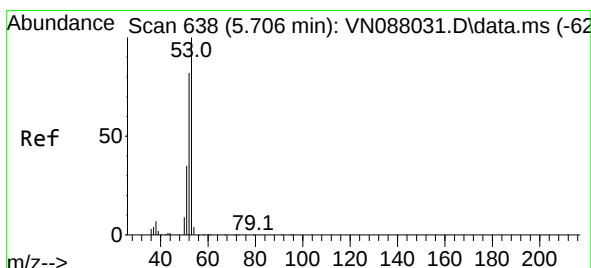
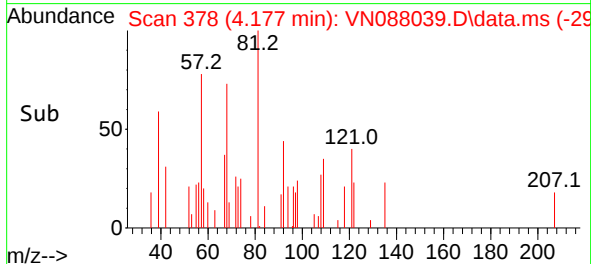
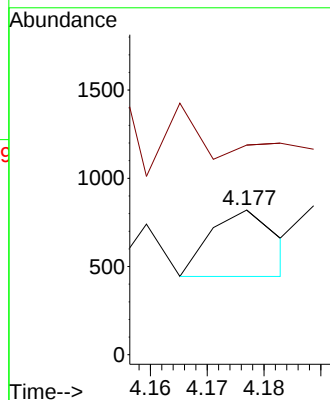
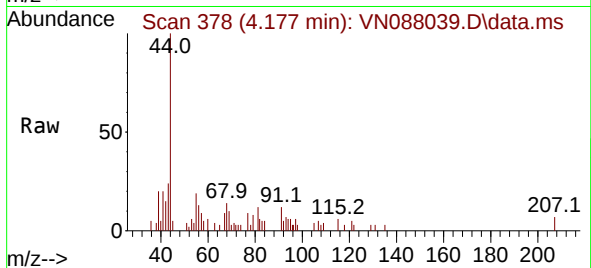
VN1008WBL01

Tgt Ion: 56 Resp: 307

Ion Ratio Lower Upper

56 100

55 0.0 0.3 0.5#



#14

Acrylonitrile

Concen: 0.338 ug/l

RT: 5.712 min Scan# 639

Delta R.T. 0.006 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

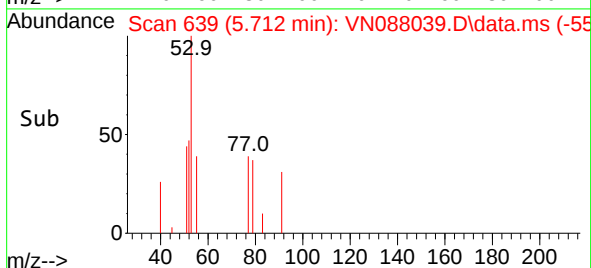
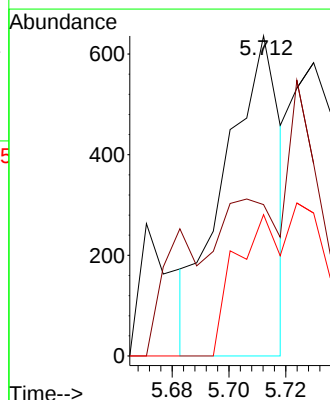
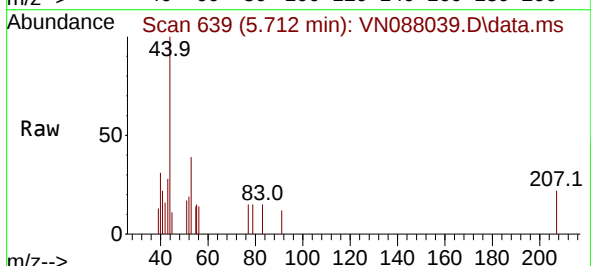
Tgt Ion: 53 Resp: 864

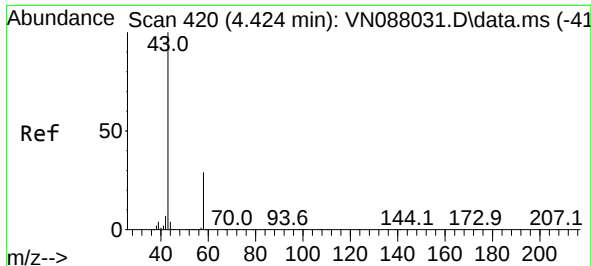
Ion Ratio Lower Upper

53 100

52 55.6 41.3 124.1

51 36.0 18.0 54.0





#15

Acetone

Concen: 0.503 ug/l

RT: 4.436 min Scan# 41

Delta R.T. 0.012 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

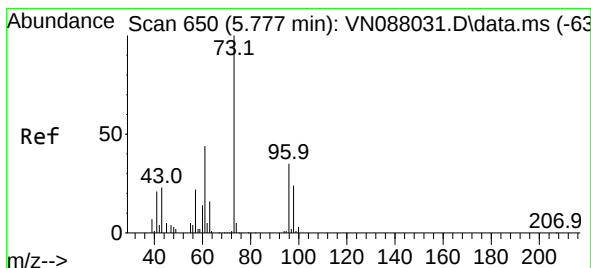
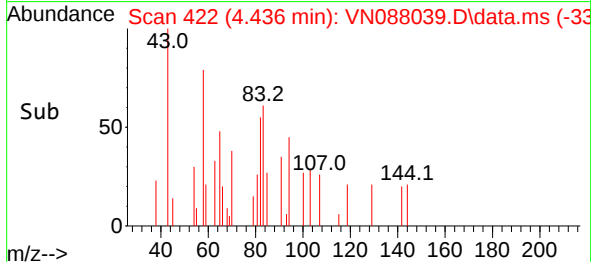
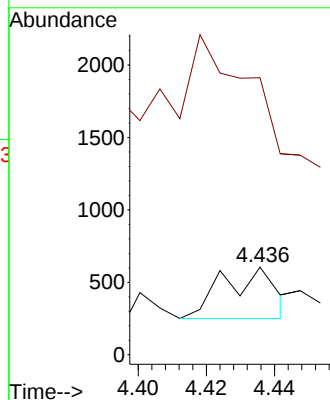
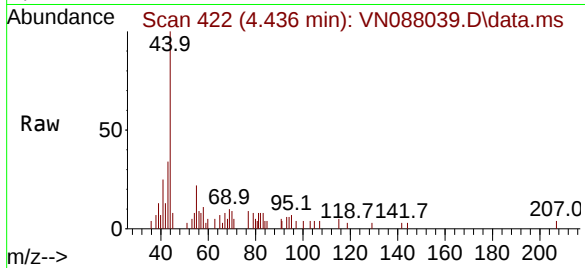
VN1008WBL01

Tgt Ion: 58 Resp: 376

Ion Ratio Lower Upper

58 100

43 147.9 282.6 424.0#



#19

trans-1,2-Dichloroethene

Concen: 0.267 ug/l

RT: 5.777 min Scan# 650

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

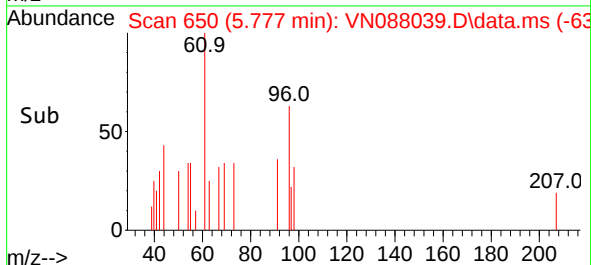
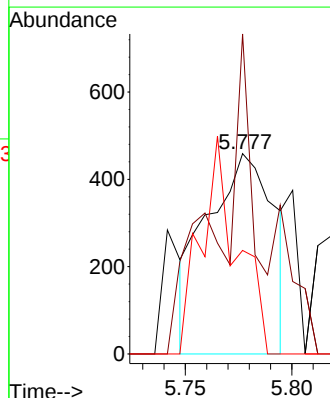
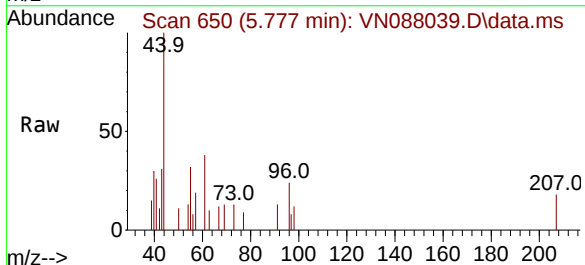
Tgt Ion: 96 Resp: 1006

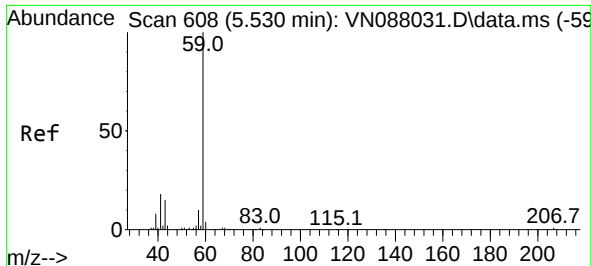
Ion Ratio Lower Upper

96 100

61 214.4 100.6 151.0#

98 97.5 54.0 81.0#

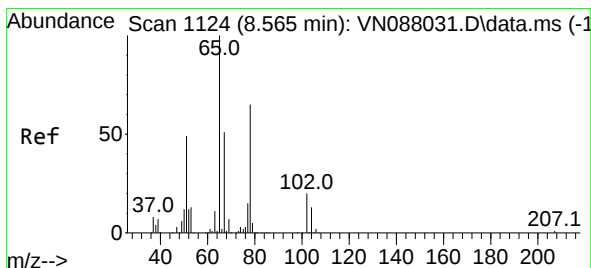
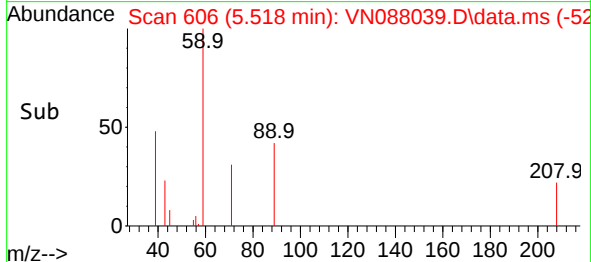
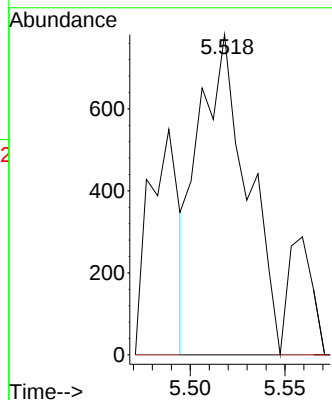
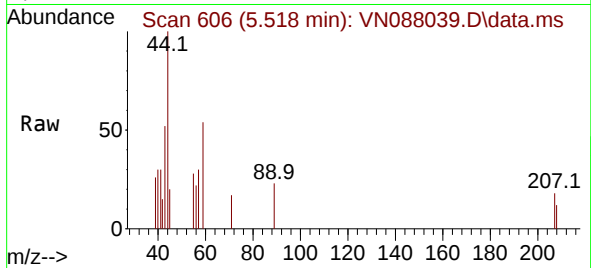




#23
tert-Butyl Alcohol
Concen: 1.369 ug/l
RT: 5.518 min Scan# 608
Delta R.T. -0.012 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

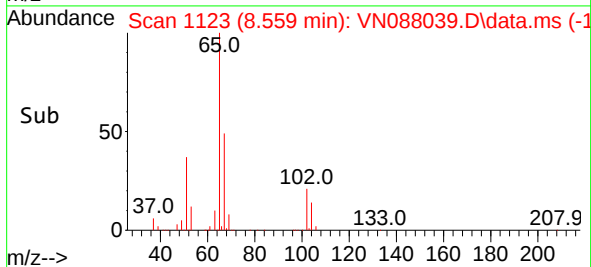
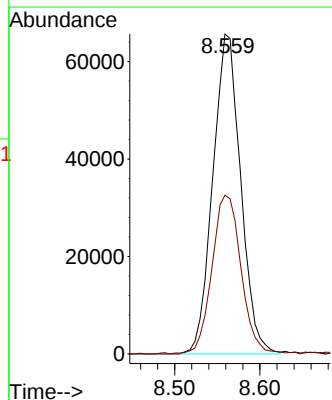
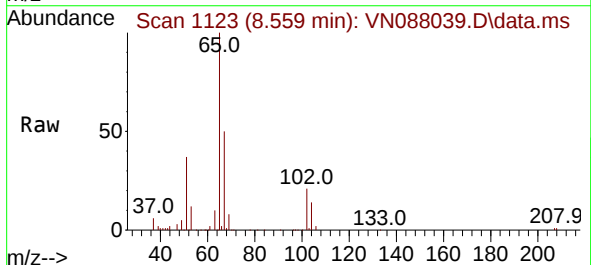
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

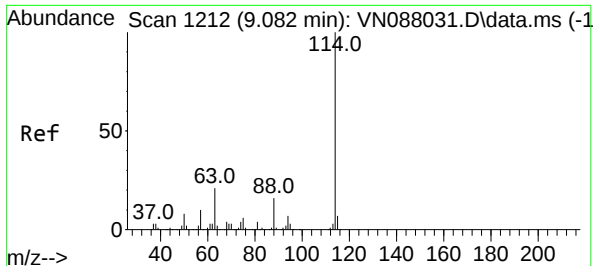
Tgt Ion: 59 Resp: 1402
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0



#27
1,2-Dichloroethane-d4
Concen: 30.887 ug/l
RT: 8.559 min Scan# 1123
Delta R.T. -0.006 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion: 65 Resp: 148932
Ion Ratio Lower Upper
65 100
67 51.8 41.9 62.9





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.083 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

VN1008WBL01

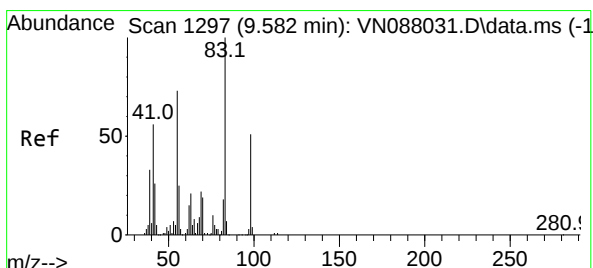
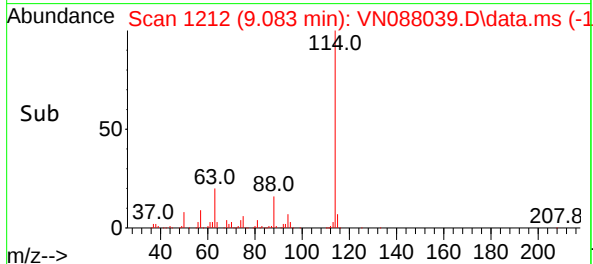
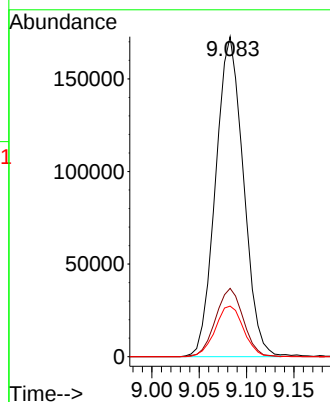
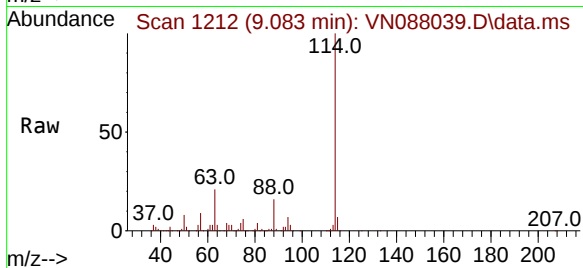
Tgt Ion:114 Resp: 352790

Ion Ratio Lower Upper

114 100

63 21.2 16.6 25.0

88 16.1 12.6 18.8



#38

Methylcyclohexane

Concen: 0.318 ug/l

RT: 9.577 min Scan# 1296

Delta R.T. -0.006 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

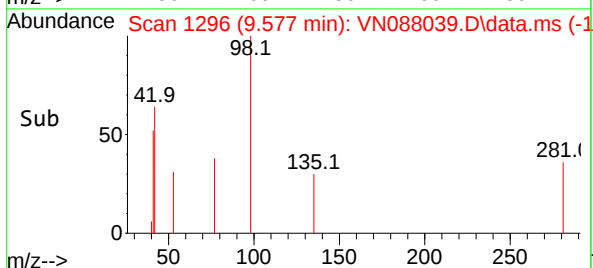
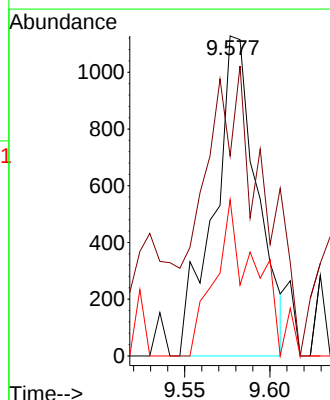
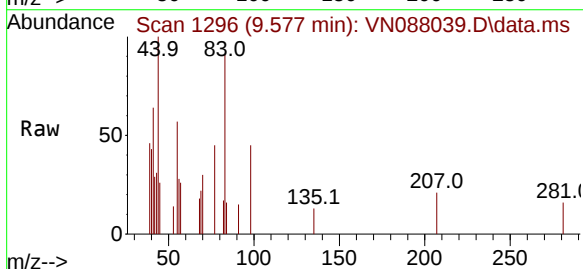
Tgt Ion: 83 Resp: 1984

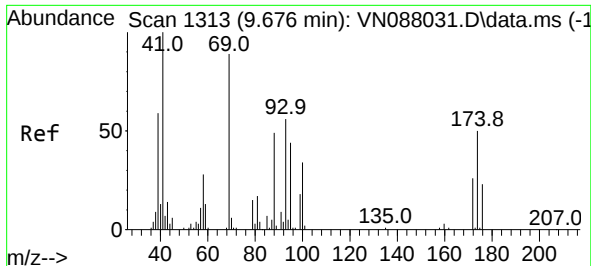
Ion Ratio Lower Upper

83 100

55 32.0 37.3 111.9#

98 27.1 25.4 76.0





#45

1,4-Dioxane

Concen: 2.196 ug/l

RT: 9.677 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

VN1008WBL01

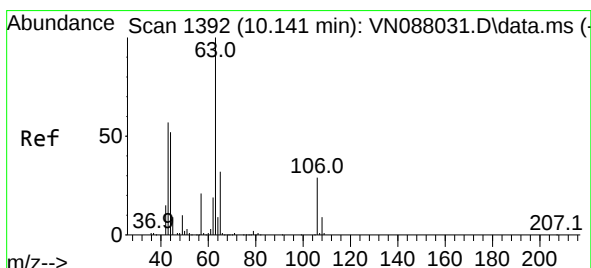
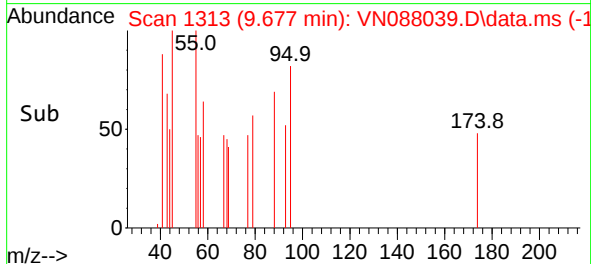
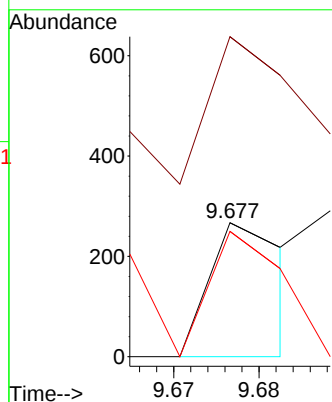
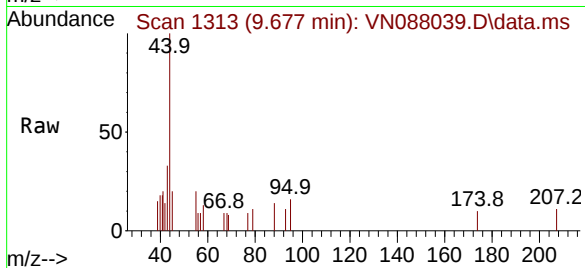
Tgt Ion: 88 Resp: 171

Ion Ratio Lower Upper

88 100

43 125.7 18.6 27.8#

58 87.7 57.4 86.2#



#55

2-Chloroethyl vinyl ether

Concen: 0.301 ug/l

RT: 10.141 min Scan# 1392

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

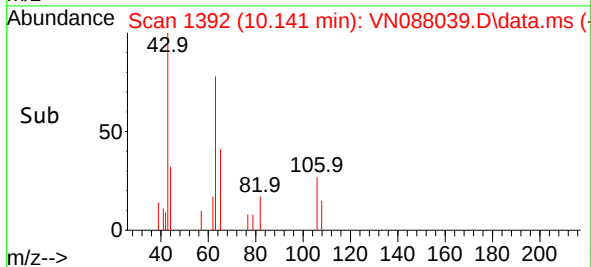
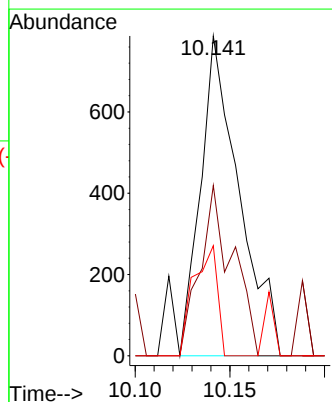
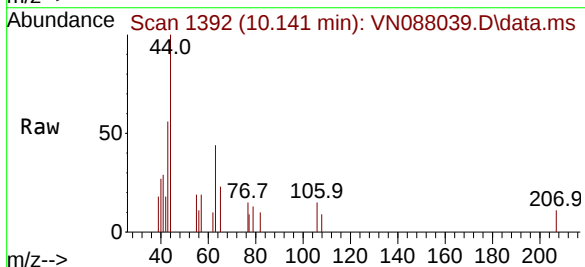
Tgt Ion: 63 Resp: 1114

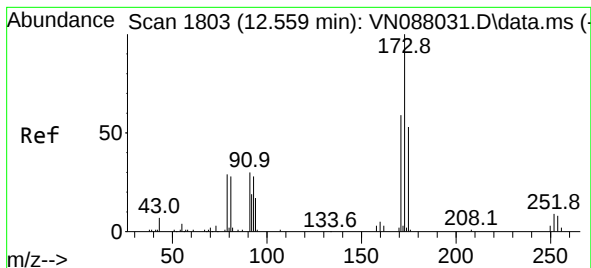
Ion Ratio Lower Upper

63 100

65 31.8 25.7 38.5

106 21.3 22.6 34.0#





#56

Bromoform

Concen: 0.350 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. 0.271 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

VN1008WBL01

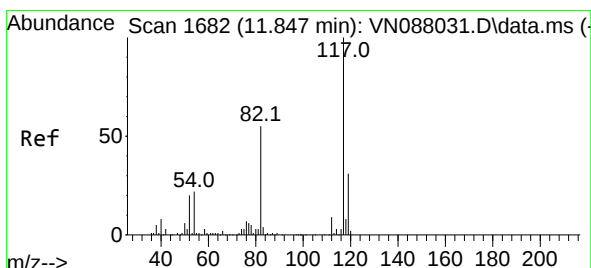
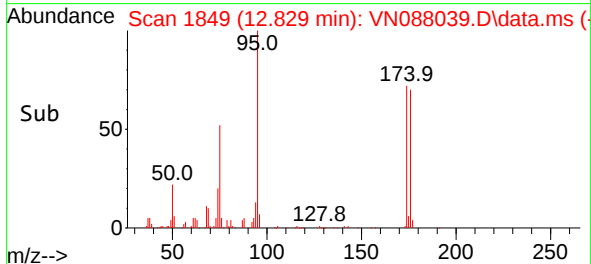
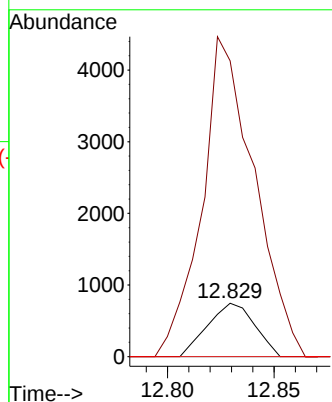
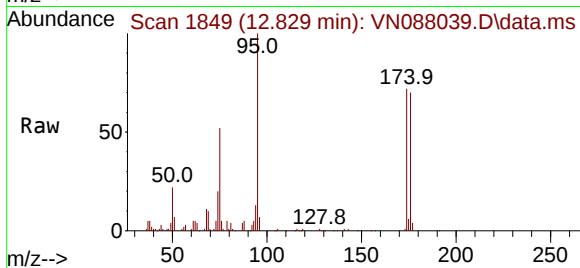
Tgt Ion:173 Resp: 1147

Ion Ratio Lower Upper

173 100

175 666.7 39.6 59.4#

254 0.0 6.6 10.0#



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.841 min Scan# 1681

Delta R.T. -0.006 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

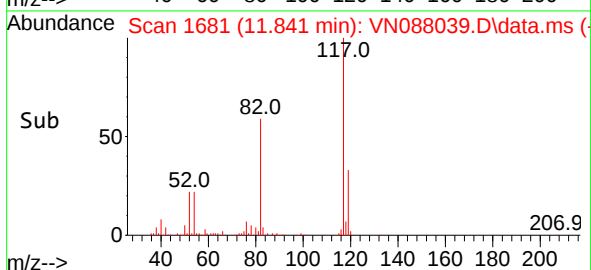
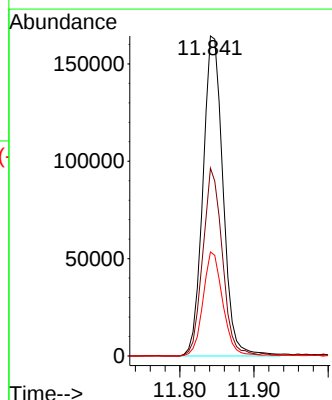
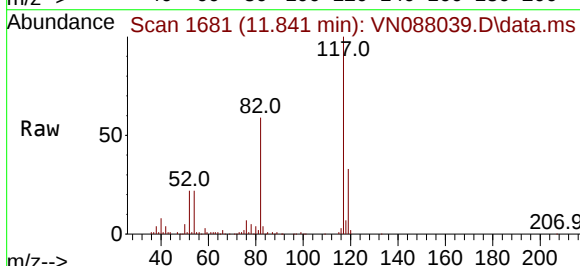
Tgt Ion:117 Resp: 309337

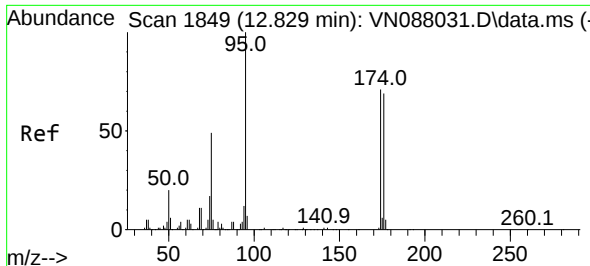
Ion Ratio Lower Upper

117 100

82 57.1 45.2 67.8

119 31.9 25.9 38.9

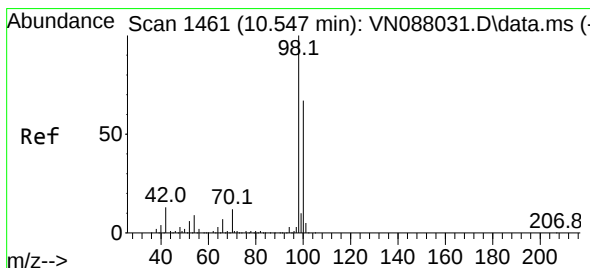
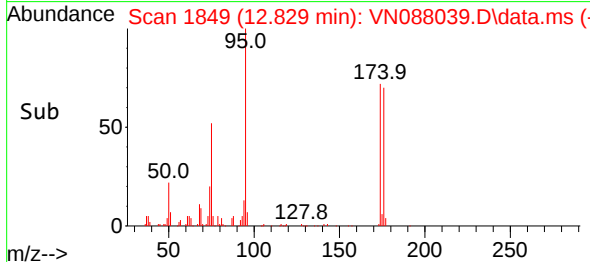
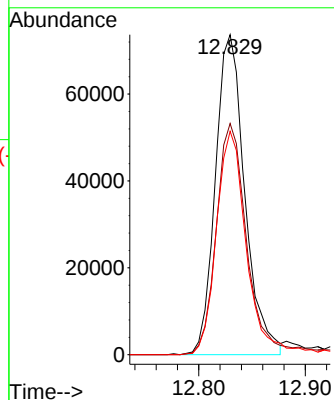
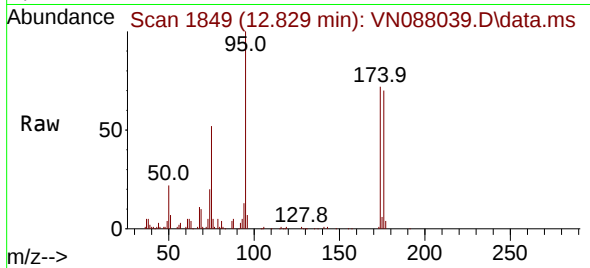




#60
4-Bromofluorobenzene
Concen: 27.694 ug/l
RT: 12.829 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

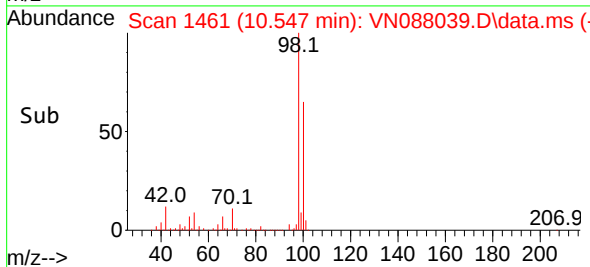
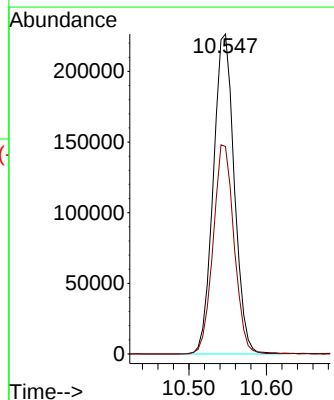
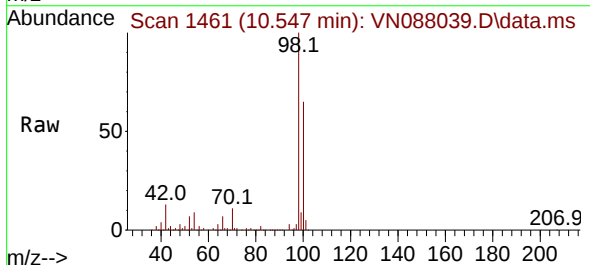
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

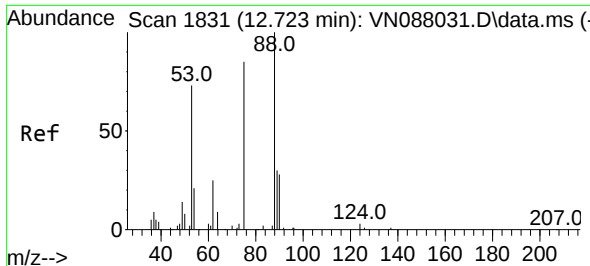
Tgt Ion: 95 Resp: 141230
Ion Ratio Lower Upper
95 100
174 75.2 57.4 86.0
176 70.4 57.0 85.4



#63
Toluene-d8
Concen: 30.941 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion: 98 Resp: 426437
Ion Ratio Lower Upper
98 100
100 65.0 53.1 79.7

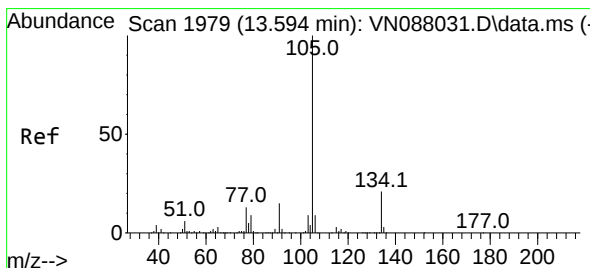
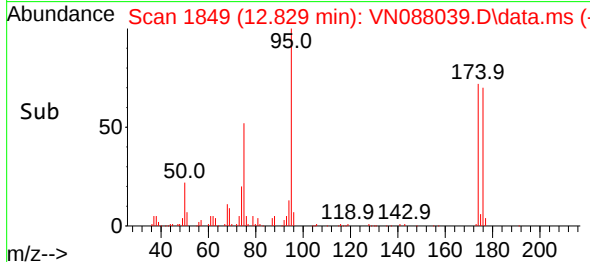
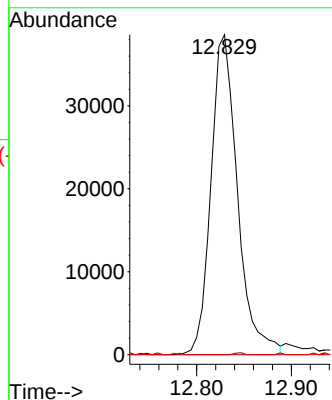
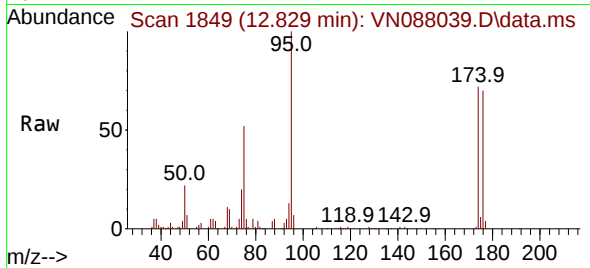




#77
t-1,4-Dichloro-2-butene
Concen: 33.377 ug/l
RT: 12.829 min Scan# 11
Delta R.T. 0.106 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

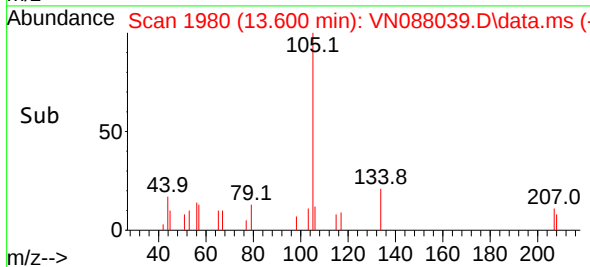
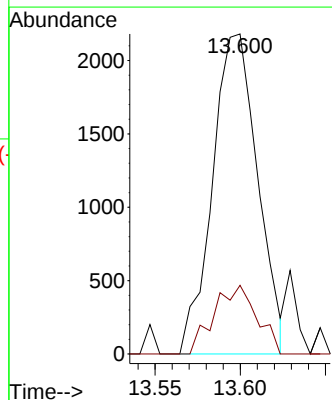
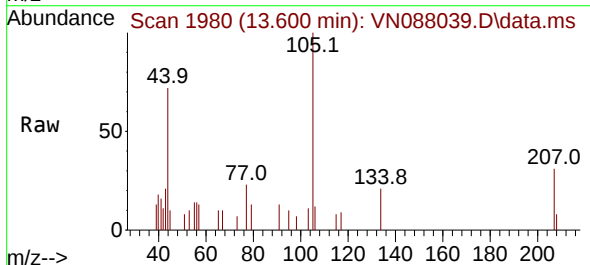
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

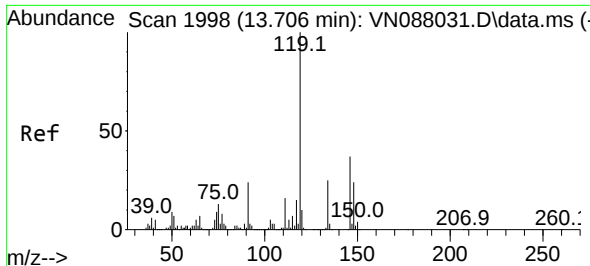
Tgt Ion: 75 Resp: 75159
Ion Ratio Lower Upper
75 100
53 0.0 41.8 125.3#
89 0.0 19.9 59.6#



#81
sec-Butylbenzene
Concen: 0.217 ug/l
RT: 13.600 min Scan# 1980
Delta R.T. 0.006 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion: 105 Resp: 4033
Ion Ratio Lower Upper
105 100
134 20.5 0.0 41.2

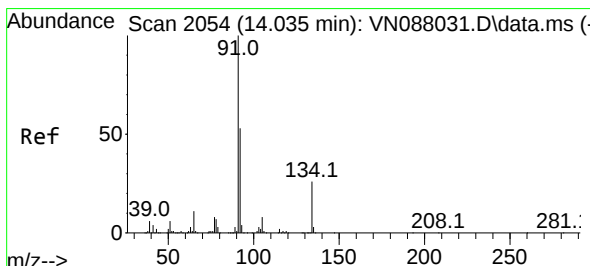
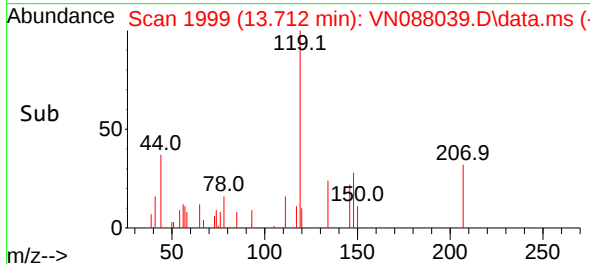
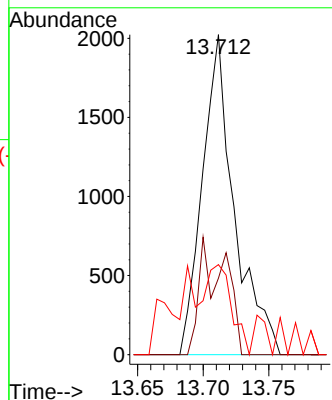
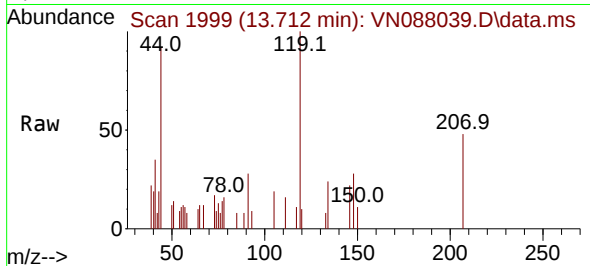




#82
p-Isopropyltoluene
Concen: 0.216 ug/l
RT: 13.712 min Scan# 1999
Delta R.T. 0.006 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

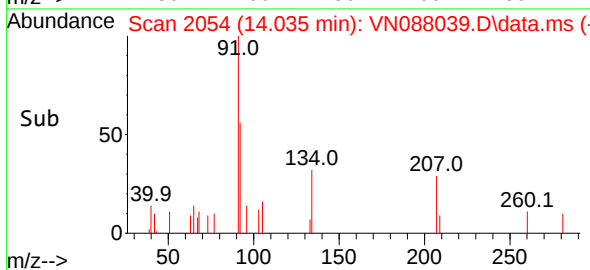
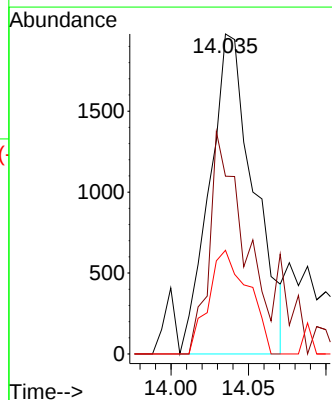
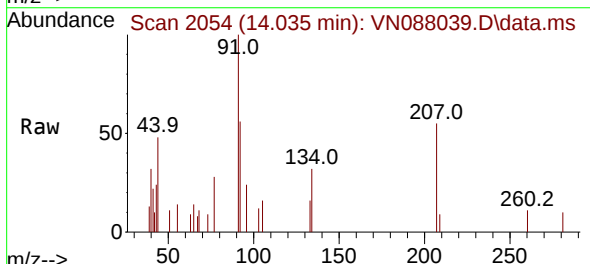
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

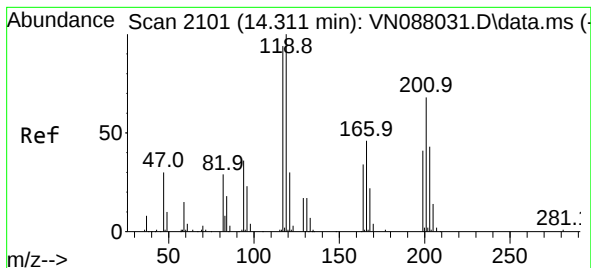
Tgt Ion:	119	Resp:	3429
Ion	Ratio	Lower	Upper
119	100		
134	15.8	0.0	52.6
91	24.0	0.0	48.2



#85
n-Butylbenzene
Concen: 0.267 ug/l
RT: 14.035 min Scan# 2054
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion:	91	Resp:	3944
Ion	Ratio	Lower	Upper
91	100		
92	54.1	0.0	107.6
134	29.1	0.0	52.6





#86

Hexachloroethane

Concen: 0.218 ug/l

RT: 14.312 min Scan# 2101

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

Instrument :

MSVOA_N

ClientSampleId :

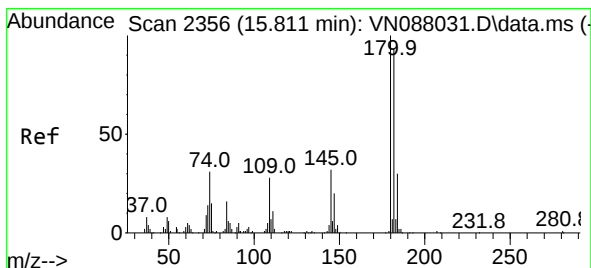
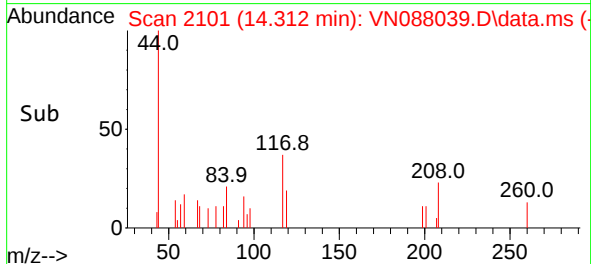
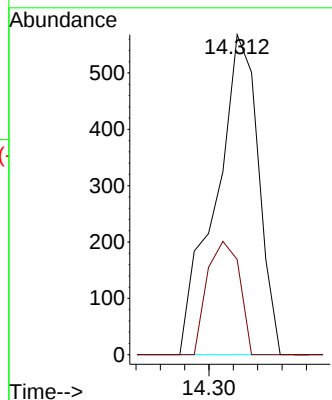
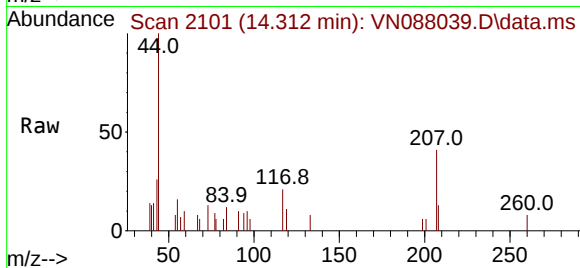
VN1008WBL01

Tgt Ion:117 Resp: 693

Ion Ratio Lower Upper

117 100

201 26.7 34.8 104.3#



#89

1,2,4-Trichlorobenzene

Concen: 0.240 ug/l

RT: 15.811 min Scan# 2356

Delta R.T. 0.000 min

Lab File: VN088039.D

Acq: 08 Oct 2025 14:20

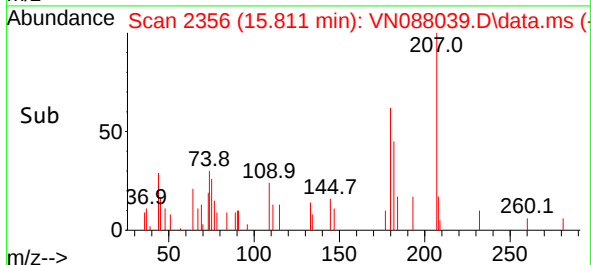
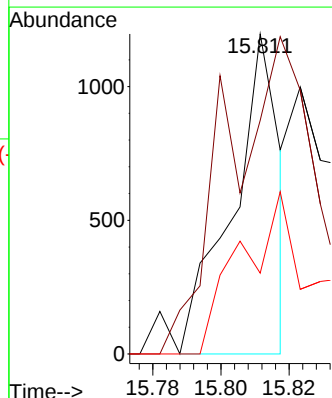
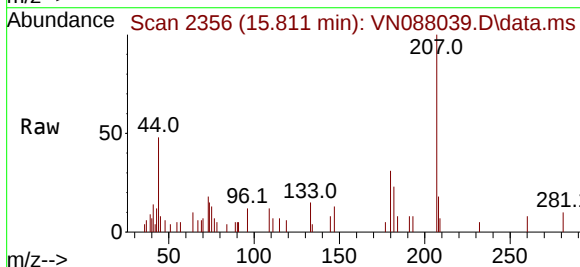
Tgt Ion:180 Resp: 1159

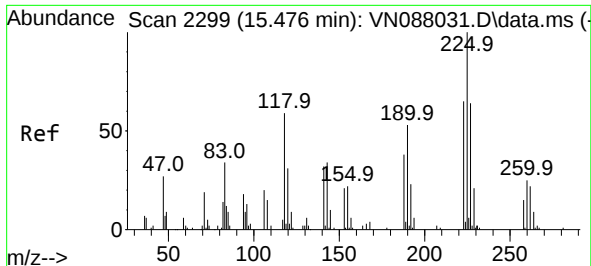
Ion Ratio Lower Upper

180 100

182 126.4 74.6 112.0#

145 25.9 27.2 40.8#

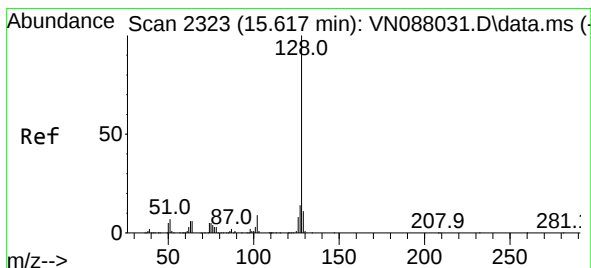
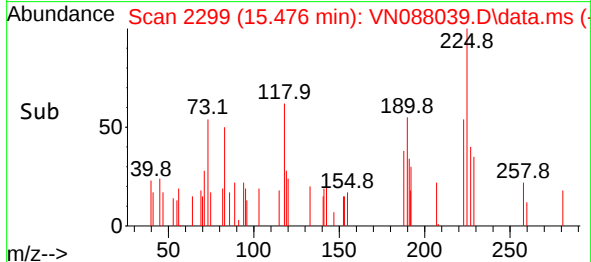
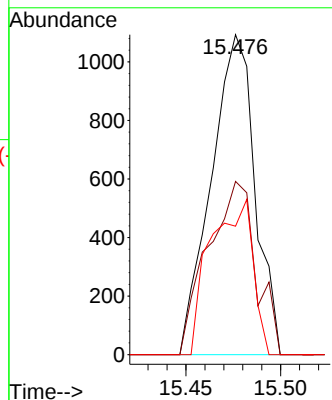
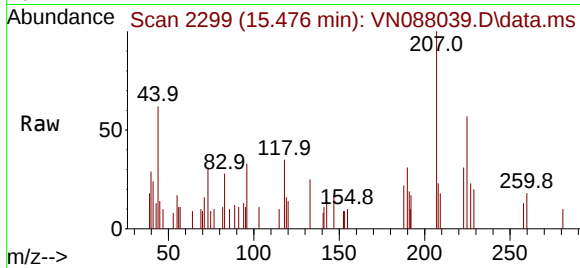




#90
Hexachlorobutadiene
Concen: 1.043 ug/l
RT: 15.476 min Scan# 21
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

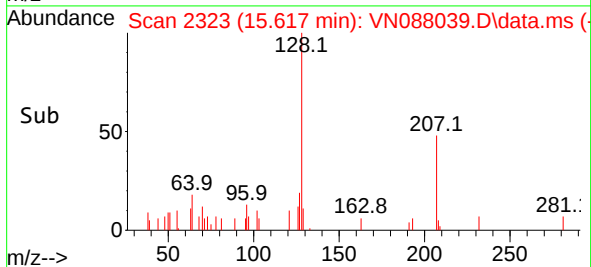
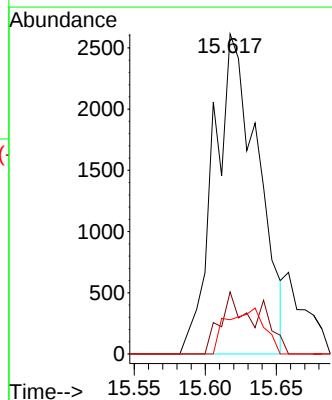
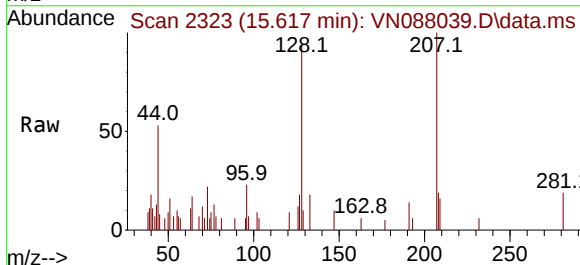
Instrument :
MSVOA_N
ClientSampleId :
VN1008WBL01

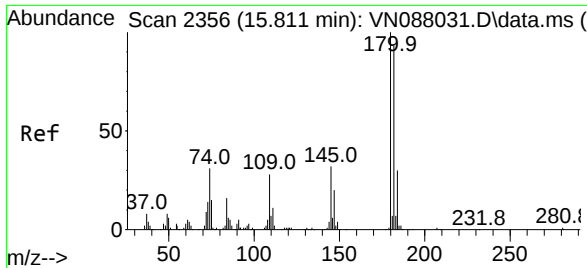
Tgt Ion:	225	Resp:	1756
Ion Ratio	Lower	Upper	
225	100		
223	59.3	0.0	129.6
227	47.0	0.0	132.2



#91
Naphthalene
Concen: 0.320 ug/l
RT: 15.617 min Scan# 2323
Delta R.T. 0.000 min
Lab File: VN088039.D
Acq: 08 Oct 2025 14:20

Tgt Ion:	128	Resp:	5657
Ion Ratio	Lower	Upper	
128	100		
127	11.4	10.3	15.5
129	3.6	8.6	13.0#





#92
 1,2,3-Trichlorobenzene
 Concen: 0.240 ug/l
 RT: 15.811 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: VN088039.D
 Acq: 08 Oct 2025 14:20

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1008WBL01

Tgt Ion:	180	Resp:	1159
Ion	Ratio	Lower	Upper
180	100		
182	126.4	0.0	186.6
145	25.9	0.0	68.0

