

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082225\
 Data File : VN087636.D
 Acq On : 22 Aug 2025 13:19
 Operator : JC\MD
 Sample : Q2921-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MW1

Quant Time: Aug 25 01:19:46 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)

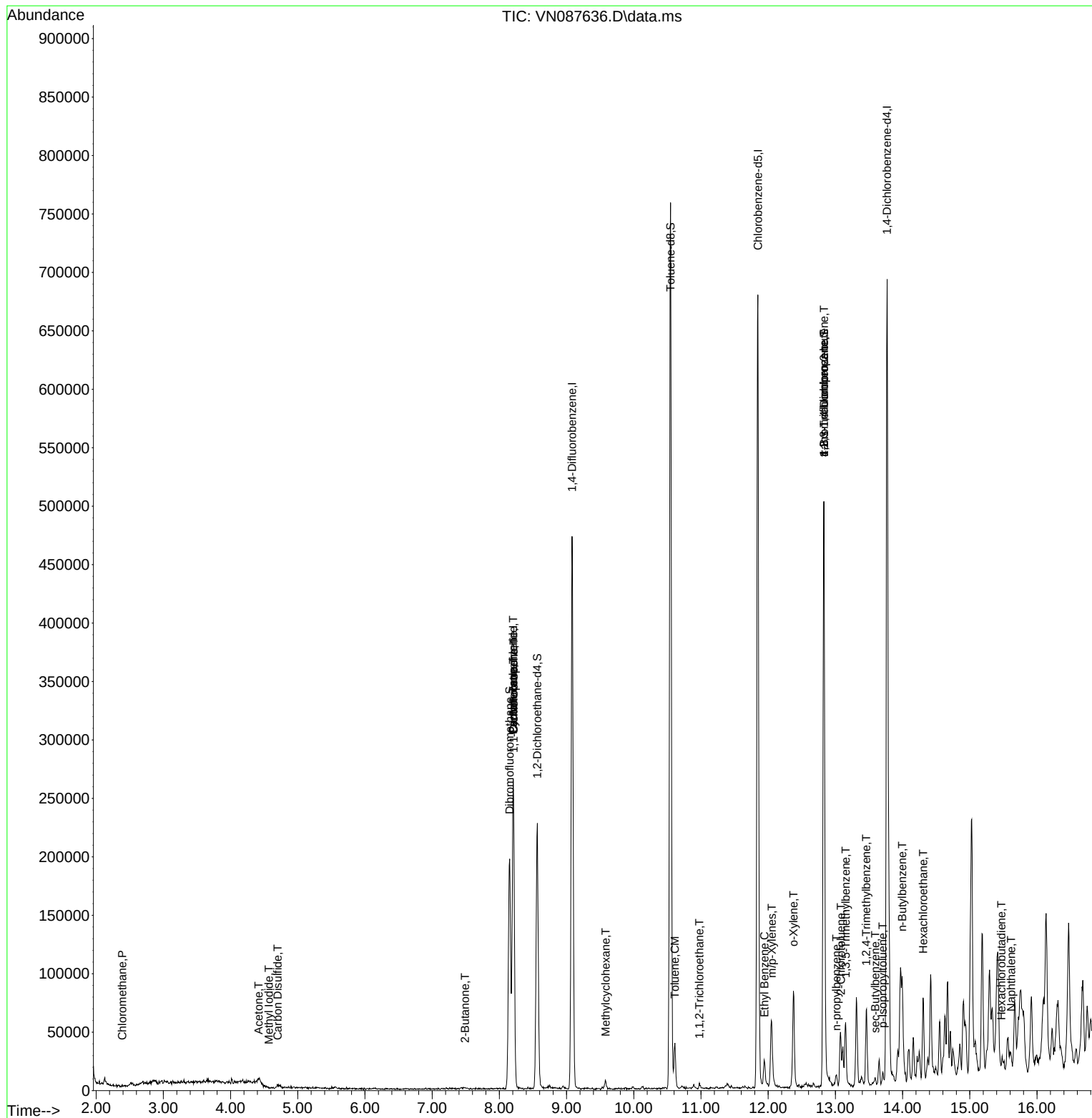
Internal Standards						
1) Pentafluorobenzene	8.206	168	171200	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	390202	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.847	117	369064	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	175398	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	185661	52.930	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 105.860%			
35) Dibromofluoromethane	8.153	113	138705	49.234	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.460%			
50) Toluene-d8	10.547	98	503862	47.785	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 95.560%			
62) 4-Bromofluorobenzene	12.829	95	177979	47.462	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 94.920%			
Target Compounds						Qvalue
3) Chloromethane	2.389	50	1027	0.411	ug/l #	82
10) Methyl Iodide	4.571	142	63	6.841	ug/l #	38
16) Acetone	4.418	43	9187	4.811	ug/l	94
17) Carbon Disulfide	4.700	76	1615	0.238	ug/l #	74
20) Methylene Chloride	5.271	84	185	Below Cal	#	5
25) 2-Butanone	7.488	43	1623	0.646	ug/l #	50
31) Cyclohexane	8.206	56	5664	1.284	ug/l #	66
36) 1,1-Dichloropropene	8.212	75	17319	4.007	ug/l #	45
38) Carbon Tetrachloride	8.206	117	20551	4.816	ug/l #	15
39) Methylcyclohexane	9.582	83	2436	0.512	ug/l #	85
52) Toluene	10.612	92	14985	1.823	ug/l	92
55) 1,1,2-Trichloroethane	10.976	97	1339	0.421	ug/l #	14
67) Ethyl Benzene	11.947	91	16128	1.015	ug/l #	83
68) m/p-Xylenes	12.053	106	18727	3.212	ug/l	98
69) o-Xylene	12.376	106	22860	4.001	ug/l	99
76) 1,2,3-Trichloropropane	12.829	75	103976	25.279	ug/l #	1
78) n-propylbenzene	13.017	91	7771	0.445	ug/l	89
79) 2-Chlorotoluene	13.082	91	6472	0.616	ug/l #	42
80) 1,3,5-Trimethylbenzene	13.153	105	26863	2.234	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.829	75	103976	66.923	ug/l #	1
84) 1,2,4-Trimethylbenzene	13.459	105	38899	3.232	ug/l	94
85) sec-Butylbenzene	13.594	105	4633	0.312	ug/l	95
86) p-Isopropyltoluene	13.706	119	5284	0.430	ug/l	99
89) n-Butylbenzene	13.994	91	11788	0.967	ug/l #	1
90) Hexachloroethane	14.306	117	4629	1.979	ug/l #	22
94) Hexachlorobutadiene	15.470	225	460	0.344	ug/l #	43
95) Naphthalene	15.617	128	9378	0.706	ug/l #	88

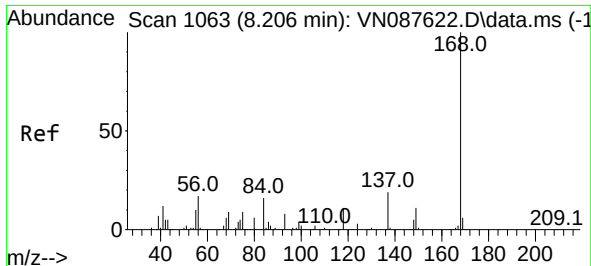
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :
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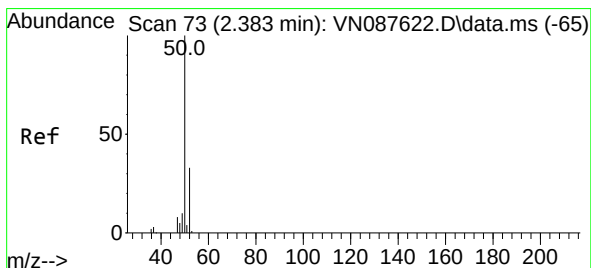
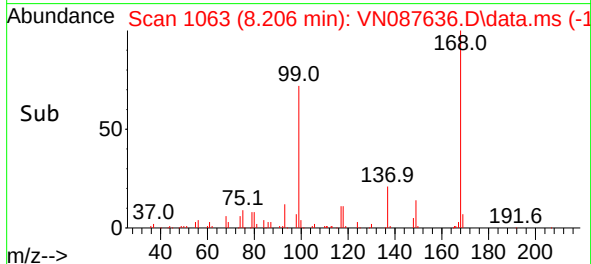
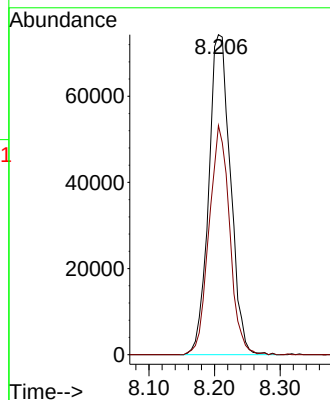
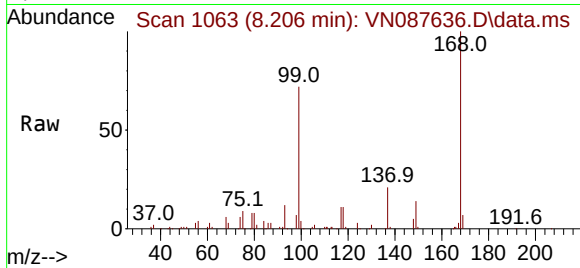




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

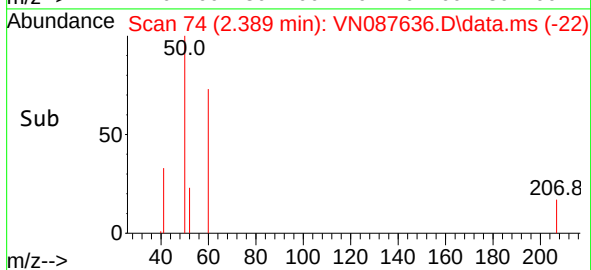
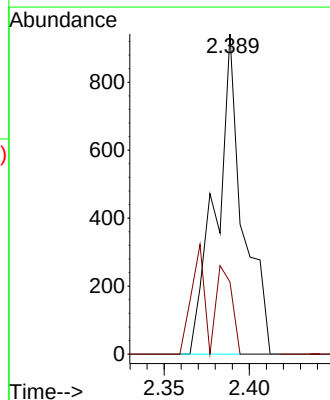
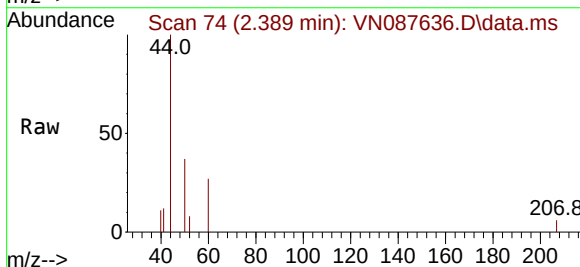
Instrument :
MSVOA_N
ClientSampleId :
MW1

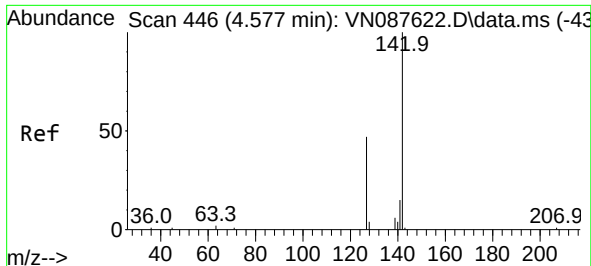
Tgt Ion:168 Resp: 171200
Ion Ratio Lower Upper
168 100
99 71.6 57.2 85.8



#3
Chloromethane
Concen: 0.411 ug/l
RT: 2.389 min Scan# 74
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 50 Resp: 1027
Ion Ratio Lower Upper
50 100
52 22.5 26.2 39.4#

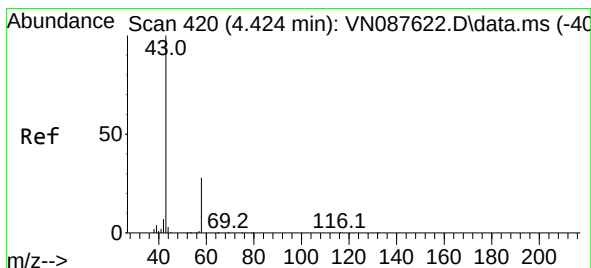
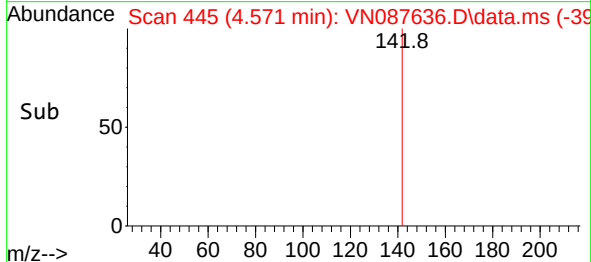
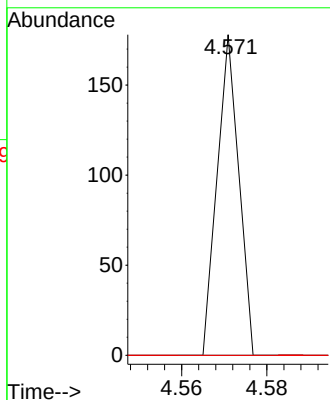
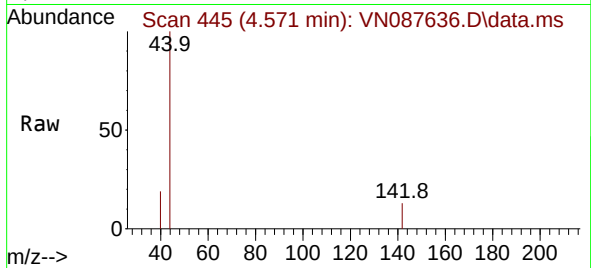




#10
Methyl Iodide
Concen: 6.841 ug/l
RT: 4.571 min Scan# 419
Delta R.T. -0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

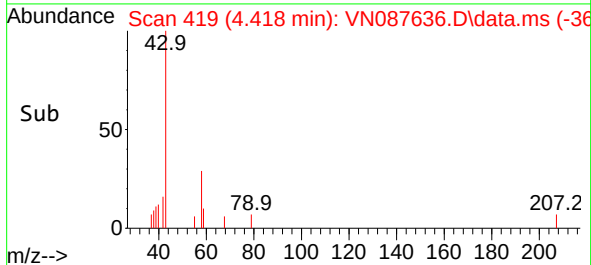
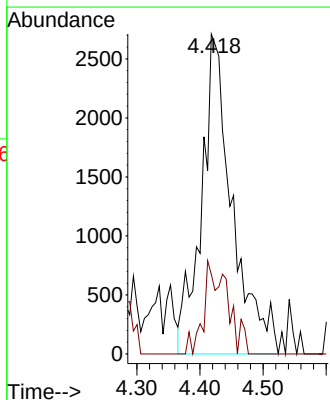
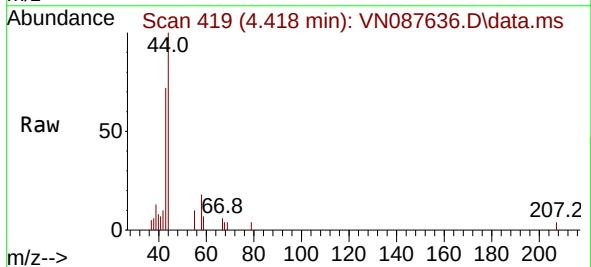
Instrument :
MSVOA_N
ClientSampleId :
MW1

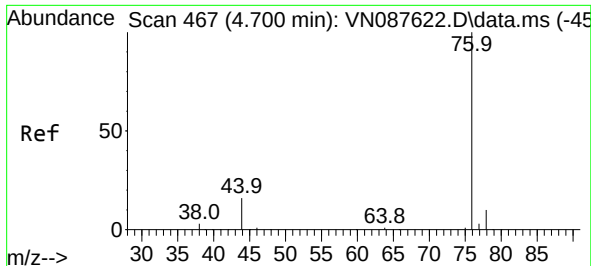
Tgt Ion:142 Resp: 63
Ion Ratio Lower Upper
142 100
127 0.0 38.0 57.0#
141 0.0 12.0 18.0#



#16
Acetone
Concen: 4.811 ug/l
RT: 4.418 min Scan# 419
Delta R.T. -0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 43 Resp: 9187
Ion Ratio Lower Upper
43 100
58 24.9 22.6 33.8

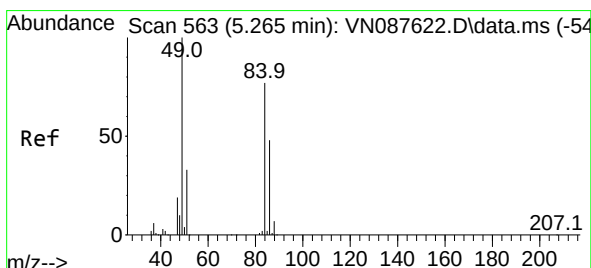
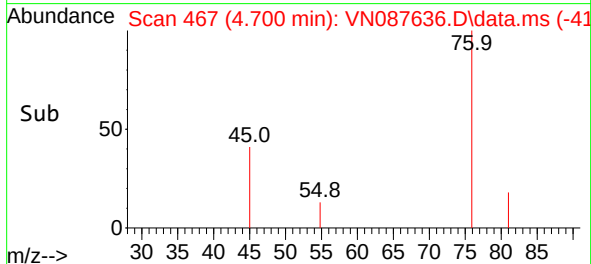
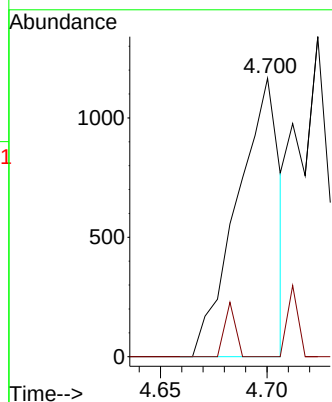
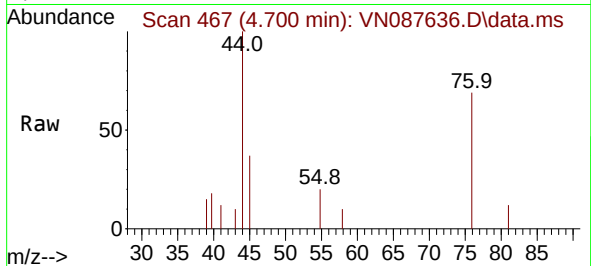




#17
Carbon Disulfide
Concen: 0.238 ug/l
RT: 4.700 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

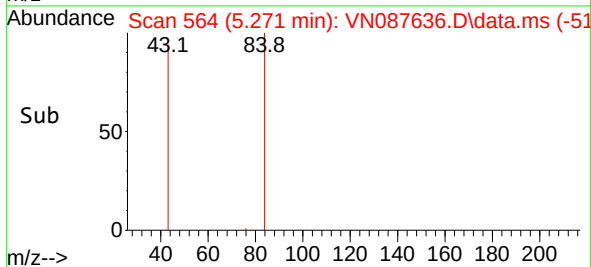
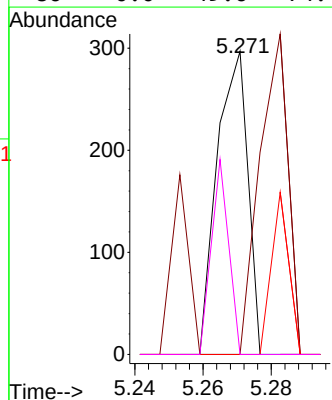
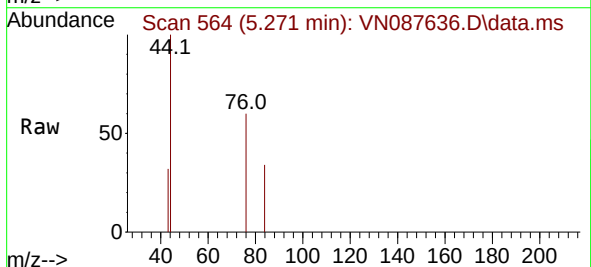
Instrument :
MSVOA_N
ClientSampleId :
MW1

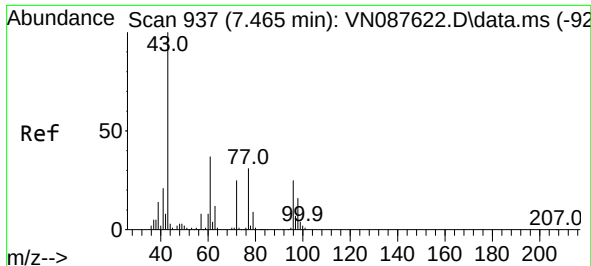
Tgt Ion: 76 Resp: 1615
Ion Ratio Lower Upper
76 100
78 0.0 7.6 11.4#



#20
Methylene Chloride
Concen: Below Cal
RT: 5.271 min Scan# 564
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 84 Resp: 185
Ion Ratio Lower Upper
84 100
49 0.0 103.4 155.2#
51 0.0 33.8 50.8#
86 0.0 49.6 74.4#

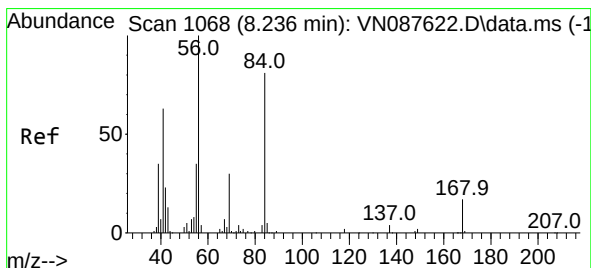
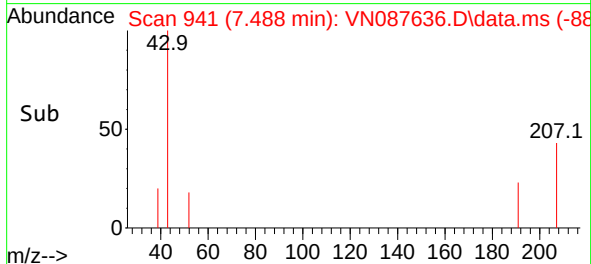
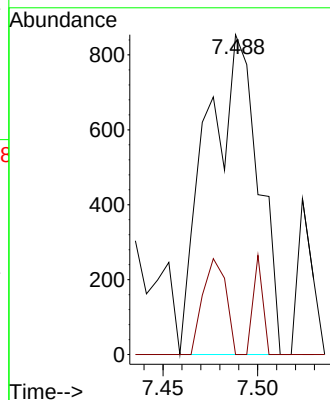
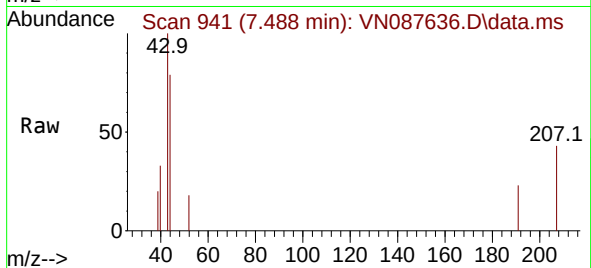




#25
2-Butanone
Concen: 0.646 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.023 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

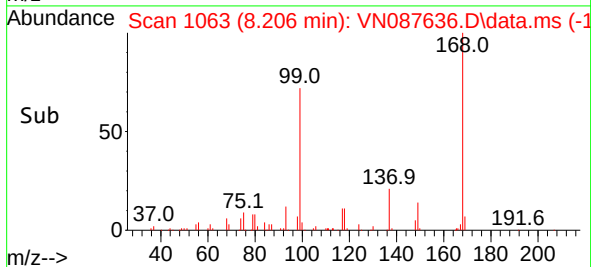
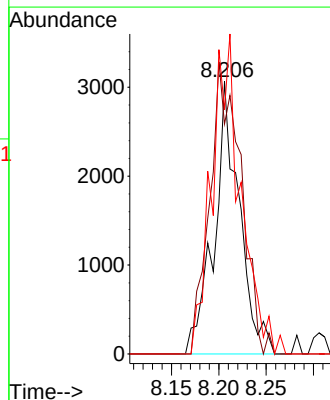
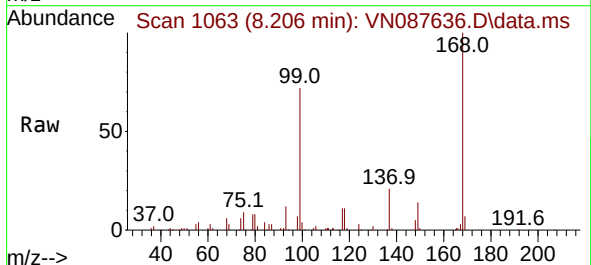
Instrument :
MSVOA_N
ClientSampleId :
MW1

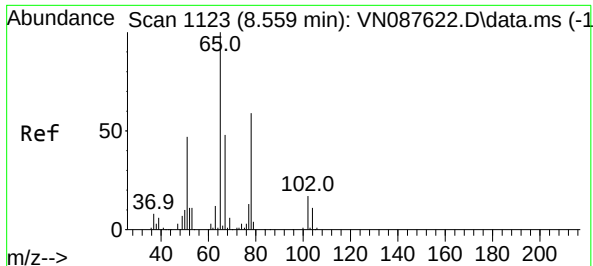
Tgt Ion: 43 Resp: 1623
Ion Ratio Lower Upper
43 100
72 0.0 19.9 29.9#



#31
Cyclohexane
Concen: 1.284 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.030 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 56 Resp: 5664
Ion Ratio Lower Upper
56 100
69 84.4 23.7 35.5#
84 89.5 64.7 97.1





#33

1,2-Dichloroethane-d4

Concen: 52.930 ug/l

RT: 8.565 min Scan# 1123

Delta R.T. 0.006 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

Instrument :

MSVOA_N

ClientSampleId :

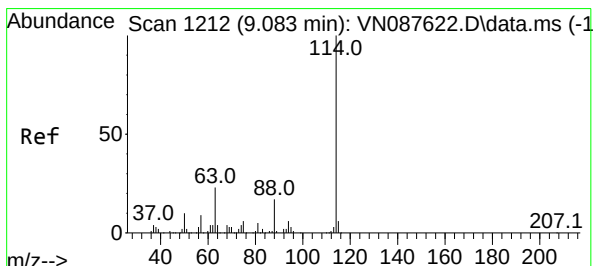
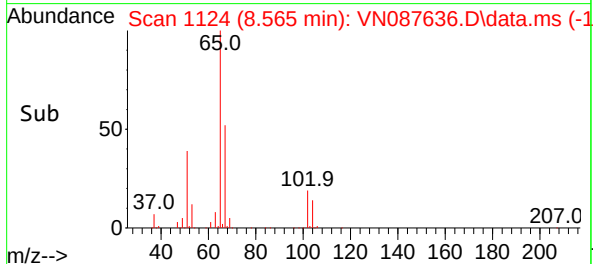
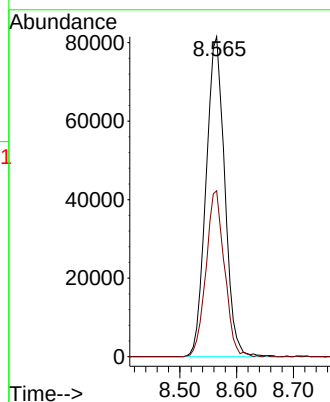
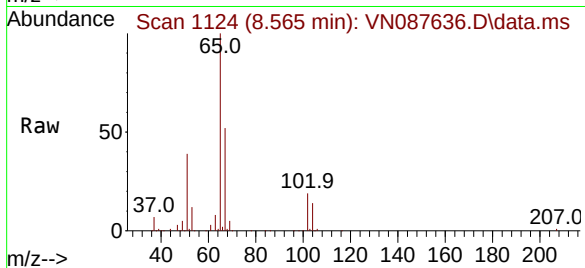
MW1

Tgt Ion: 65 Resp: 185661

Ion Ratio Lower Upper

65 100

67 51.3 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: VN087636.D

Acq: 22 Aug 2025 13:19

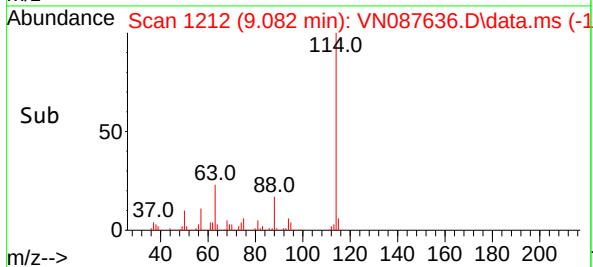
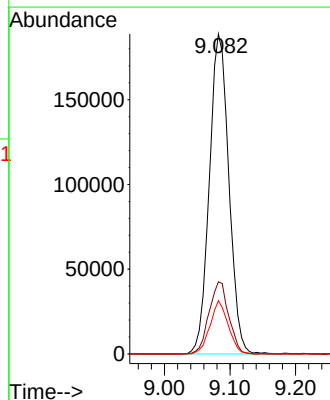
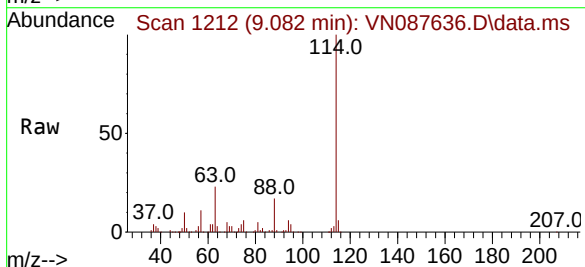
Tgt Ion: 114 Resp: 390202

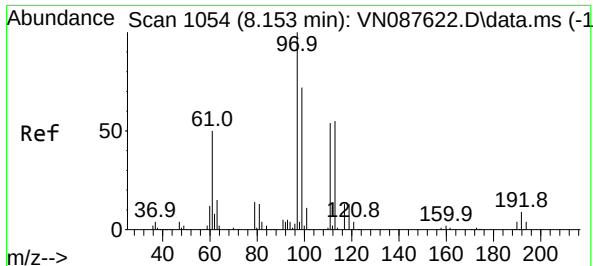
Ion Ratio Lower Upper

114 100

63 22.5 0.0 45.2

88 16.7 0.0 33.4





#35

Dibromofluoromethane

Concen: 49.234 ug/l

RT: 8.153 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

Instrument :

MSVOA_N

ClientSampleId :

MW1

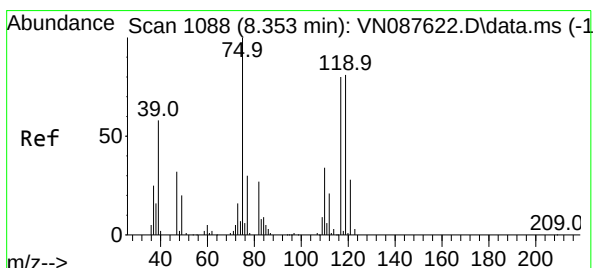
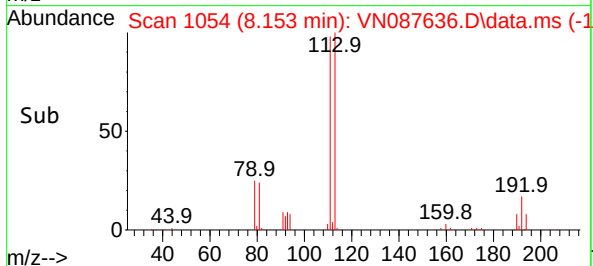
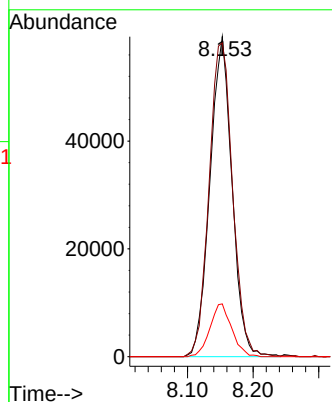
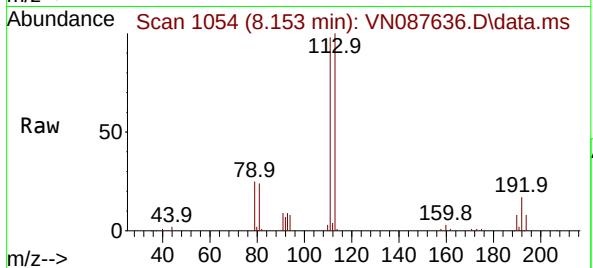
Tgt Ion:113 Resp: 138705

Ion Ratio Lower Upper

113 100

111 104.4 82.8 124.2

192 16.3 12.8 19.2



#36

1,1-Dichloropropene

Concen: 4.007 ug/l

RT: 8.212 min Scan# 1064

Delta R.T. -0.141 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

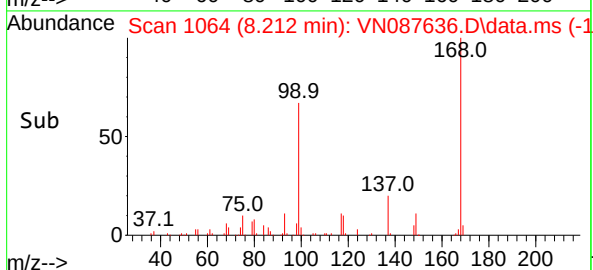
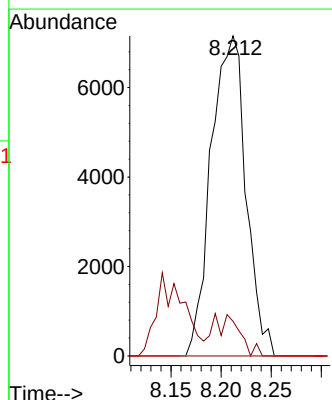
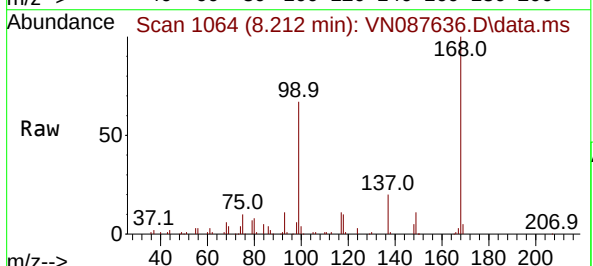
Tgt Ion: 75 Resp: 17319

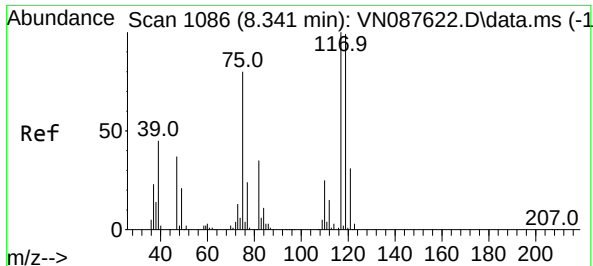
Ion Ratio Lower Upper

75 100

110 1.7 15.9 47.6#

77 0.0 24.4 36.6#

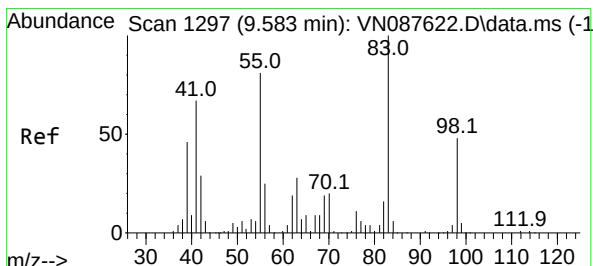
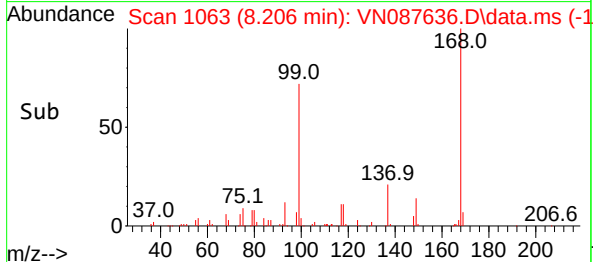
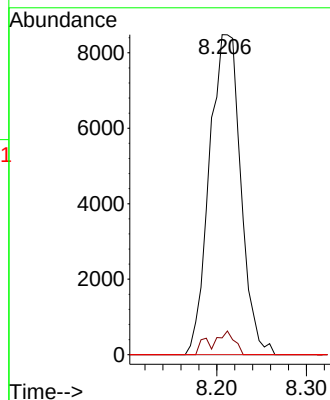
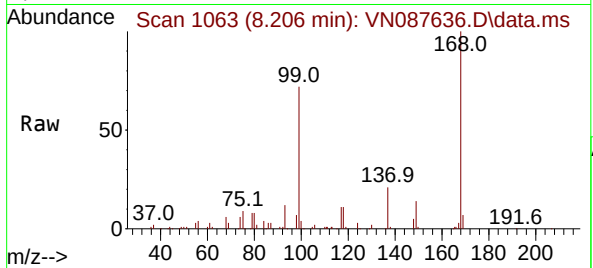




#38
Carbon Tetrachloride
Concen: 4.816 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.135 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

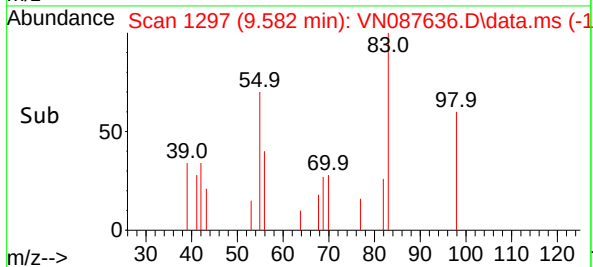
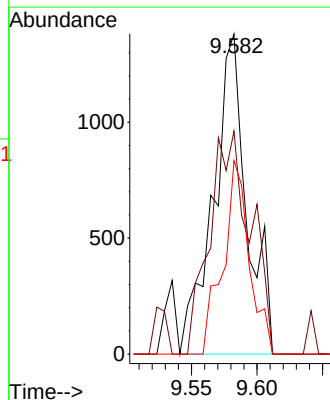
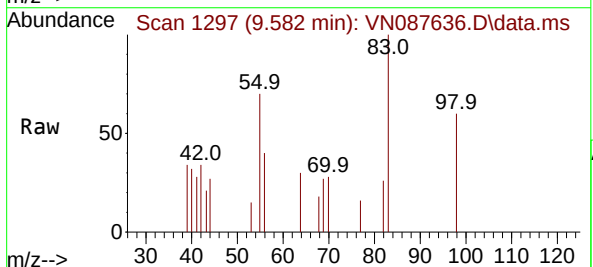
Instrument :
MSVOA_N
ClientSampleId :
MW1

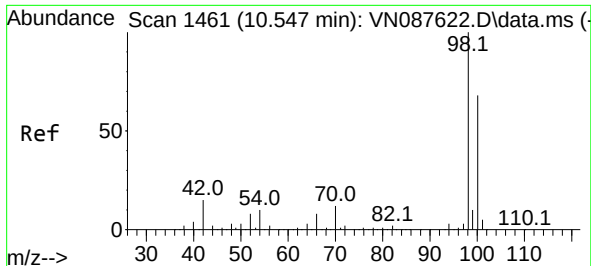
Tgt Ion:117 Resp: 20551
Ion Ratio Lower Upper
117 100
119 5.2 79.0 118.6#
121 0.0 25.0 37.6#



#39
Methylcyclohexane
Concen: 0.512 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 83 Resp: 2436
Ion Ratio Lower Upper
83 100
55 69.6 64.6 96.8
98 60.4 38.4 57.6#

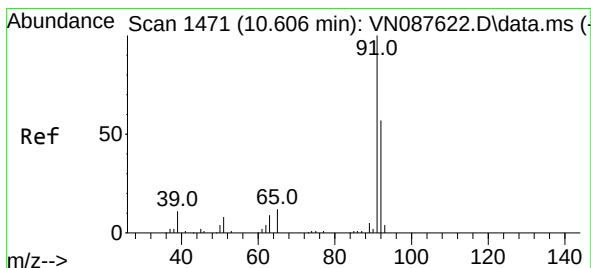
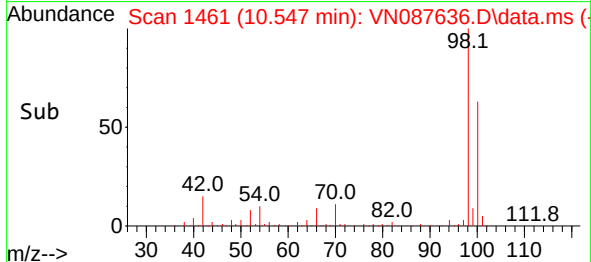
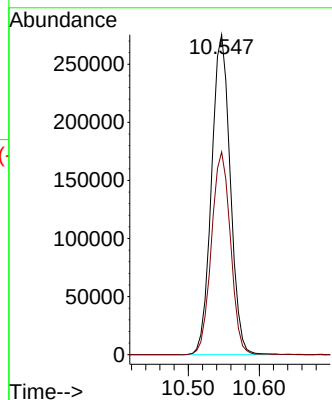
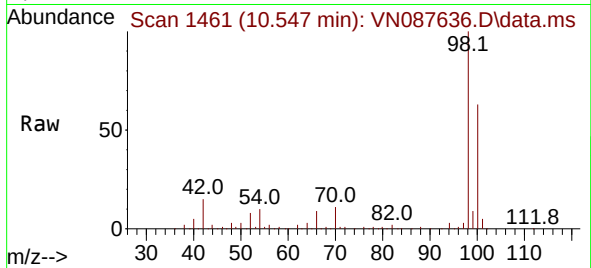




#50
Toluene-d8
Concen: 47.785 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

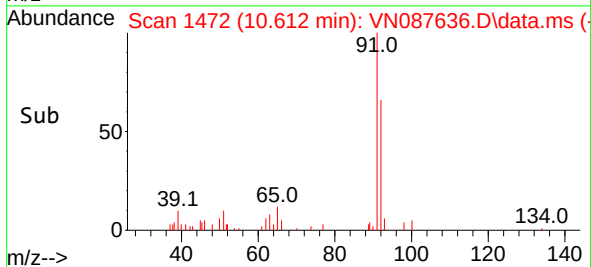
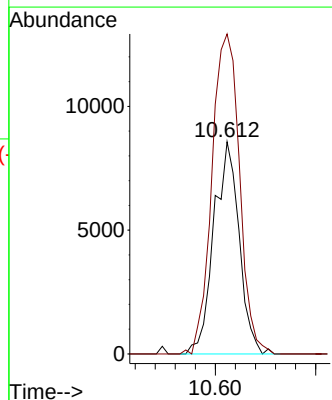
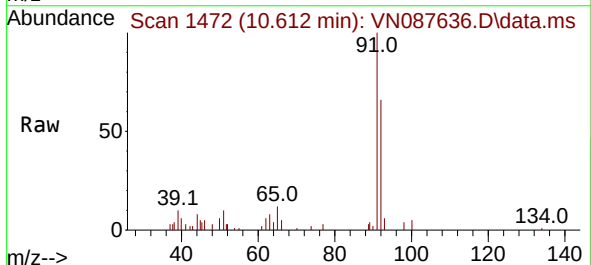
Instrument :
MSVOA_N
ClientSampleId :
MW1

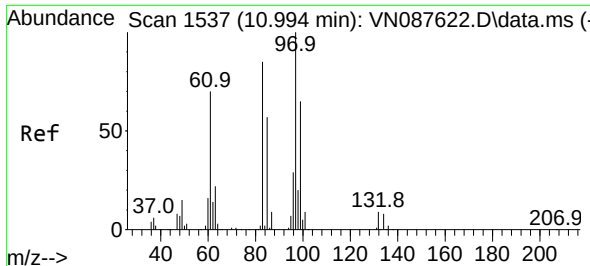
Tgt Ion: 98 Resp: 503862
Ion Ratio Lower Upper
98 100
100 64.5 52.8 79.2



#52
Toluene
Concen: 1.823 ug/l
RT: 10.612 min Scan# 1472
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 92 Resp: 14985
Ion Ratio Lower Upper
92 100
91 164.9 140.4 210.6

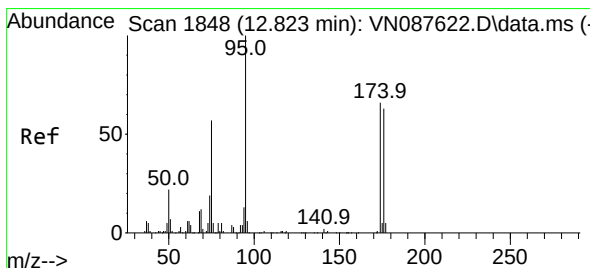
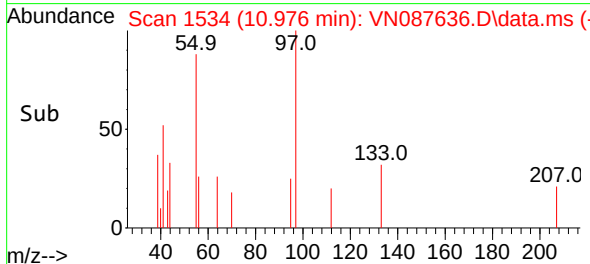
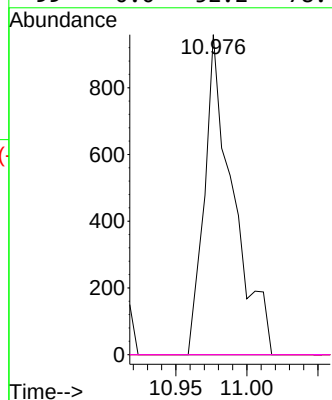
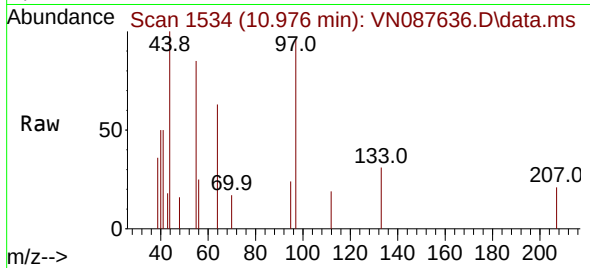




#55
1,1,2-Trichloroethane
Concen: 0.421 ug/l
RT: 10.976 min Scan# 11
Delta R.T. -0.018 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

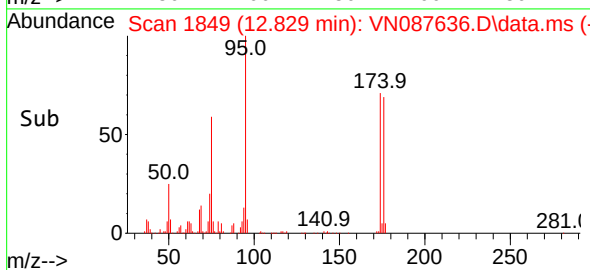
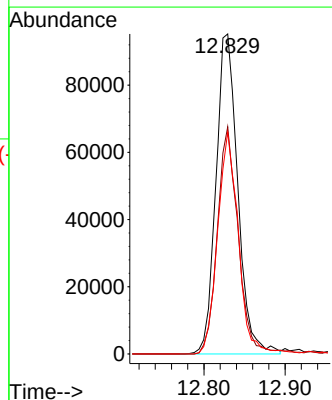
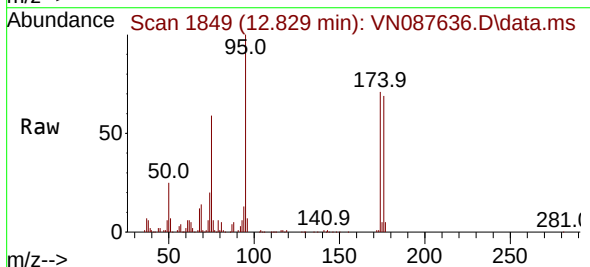
Instrument :
MSVOA_N
ClientSampleId :
MW1

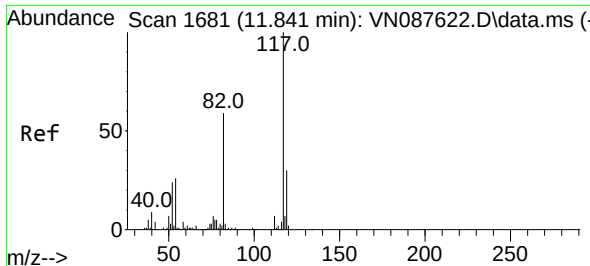
Tgt Ion: 97	Resp: 1339
Ion Ratio	Lower Upper
97 100	
83 0.0	68.2 102.4#
85 0.0	45.5 68.3#
99 0.0	52.2 78.4#



#62
4-Bromofluorobenzene
Concen: 47.462 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 95	Resp: 177979
Ion Ratio	Lower Upper
95 100	
174 67.9	0.0 138.4
176 66.0	0.0 132.6

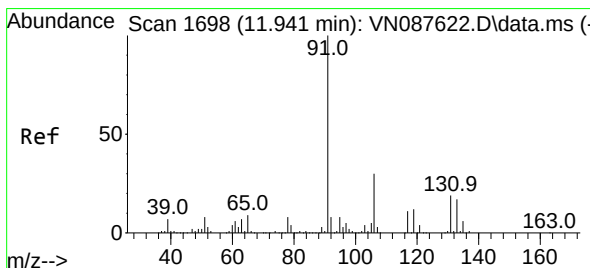
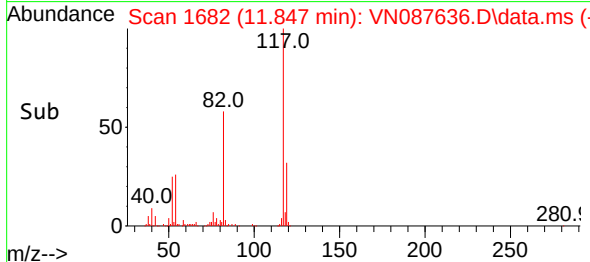
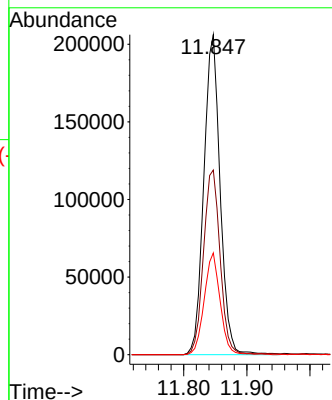
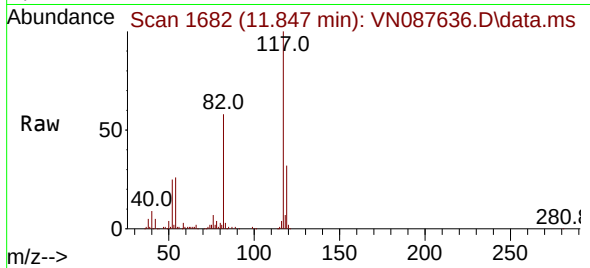




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.847 min Scan# 1681
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

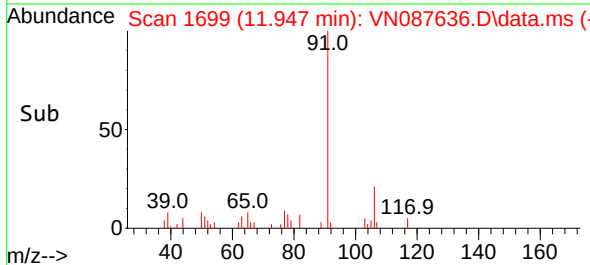
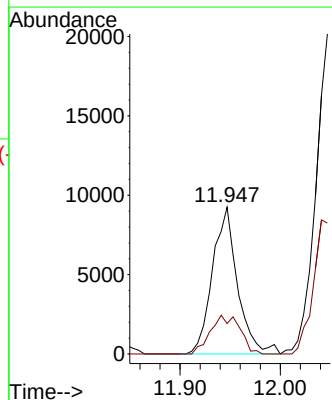
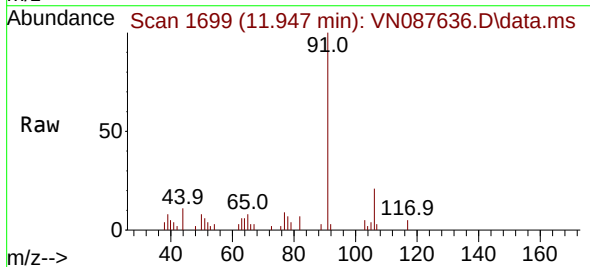
Instrument :
MSVOA_N
ClientSampleId :
MW1

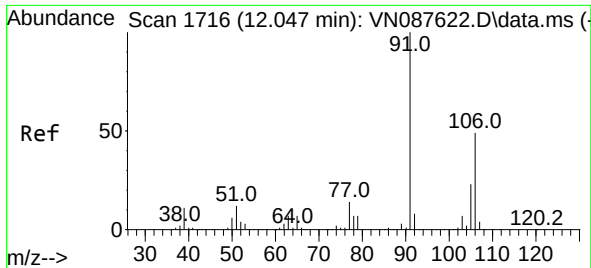
Tgt Ion:117 Resp: 369064
Ion Ratio Lower Upper
117 100
82 57.7 47.4 71.2
119 31.8 24.3 36.5



#67
Ethyl Benzene
Concen: 1.015 ug/l
RT: 11.947 min Scan# 1699
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 91 Resp: 16128
Ion Ratio Lower Upper
91 100
106 20.8 24.1 36.1#

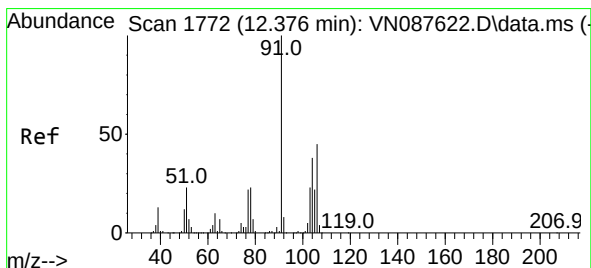
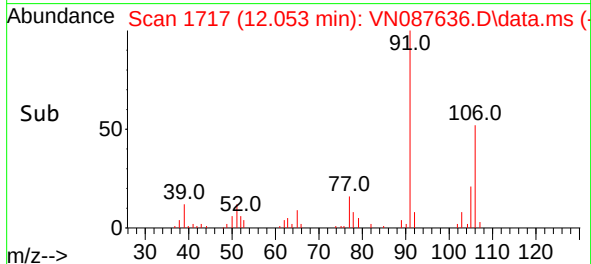
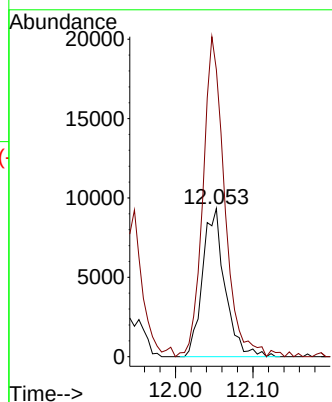
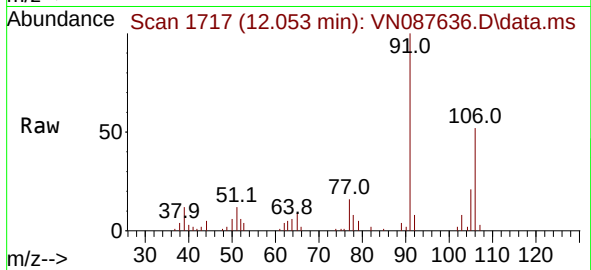




#68
m/p-Xylenes
Concen: 3.212 ug/l
RT: 12.053 min Scan# 1716
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

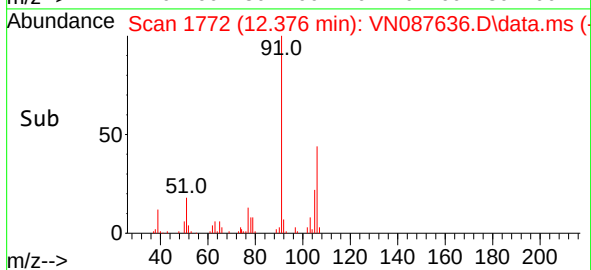
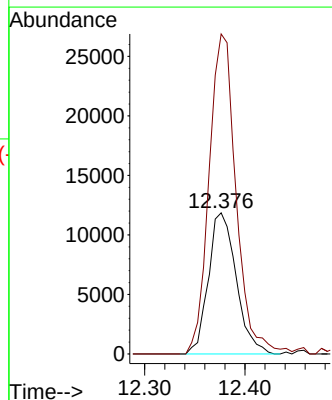
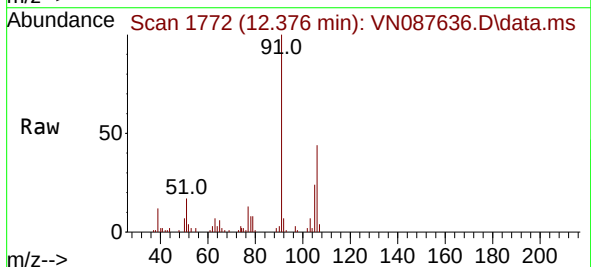
Instrument :
MSVOA_N
ClientSampleId :
MW1

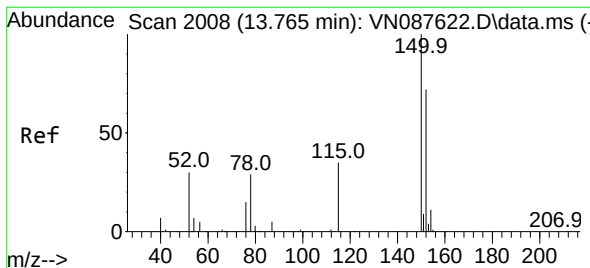
Tgt Ion:106 Resp: 18727
Ion Ratio Lower Upper
106 100
91 208.2 169.3 253.9



#69
o-Xylene
Concen: 4.001 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion:106 Resp: 22860
Ion Ratio Lower Upper
106 100
91 220.6 111.4 334.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 2008

Delta R.T. 0.006 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

Instrument :

MSVOA_N

ClientSampleId :

MW1

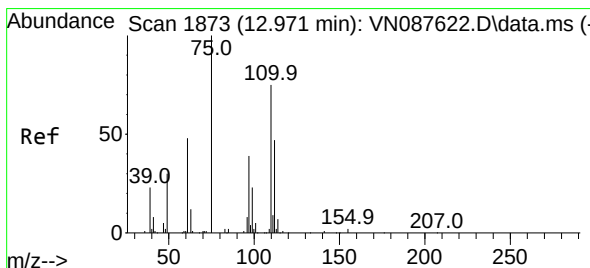
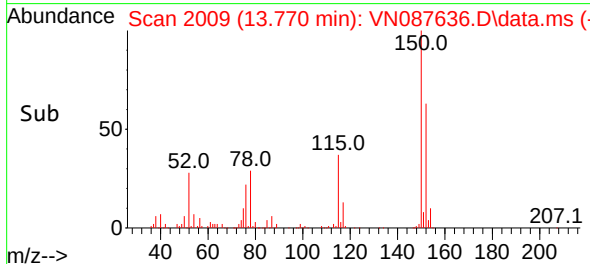
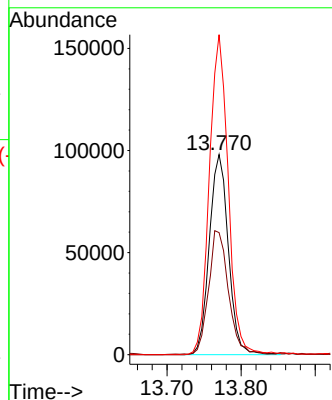
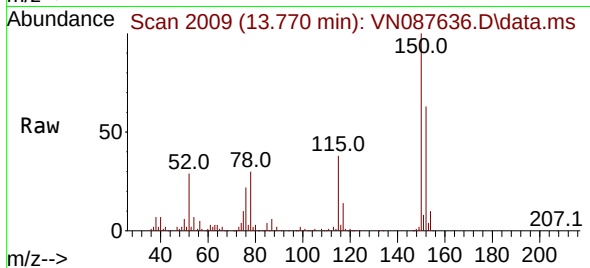
Tgt Ion:152 Resp: 175398

Ion Ratio Lower Upper

152 100

115 64.9 32.3 96.8

150 158.4 0.0 351.0



#76

1,2,3-Trichloropropane

Concen: 25.279 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. -0.141 min

Lab File: VN087636.D

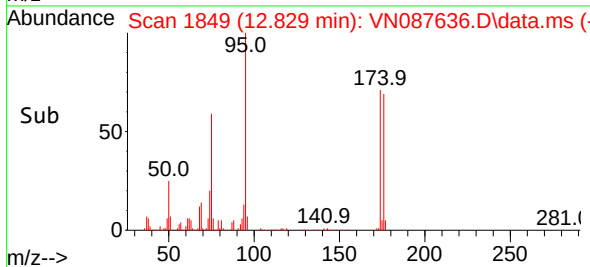
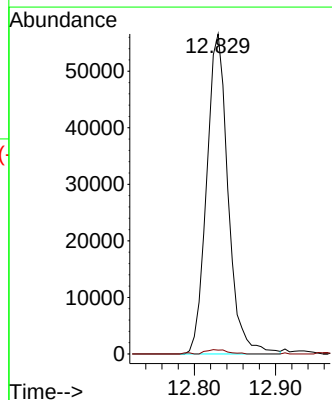
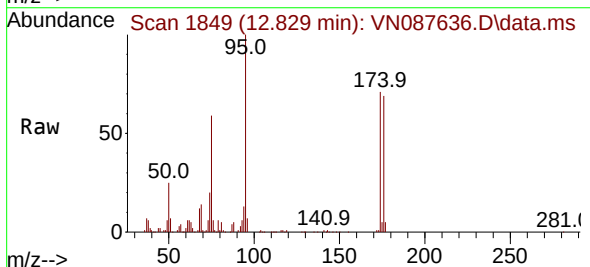
Acq: 22 Aug 2025 13:19

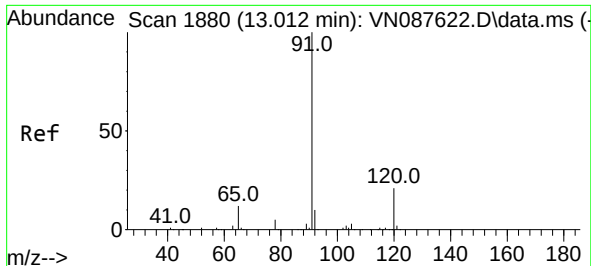
Tgt Ion: 75 Resp: 103976

Ion Ratio Lower Upper

75 100

77 1.4 89.1 267.4#

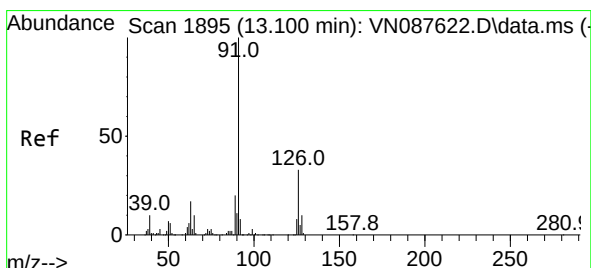
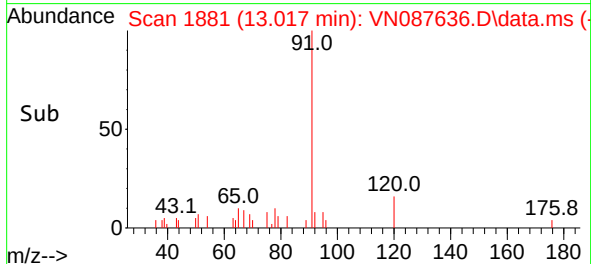
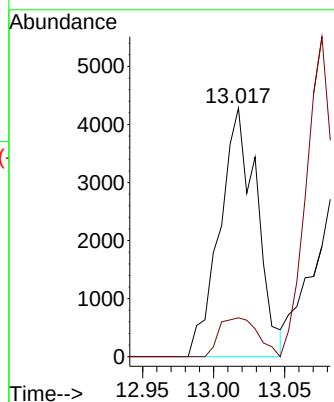
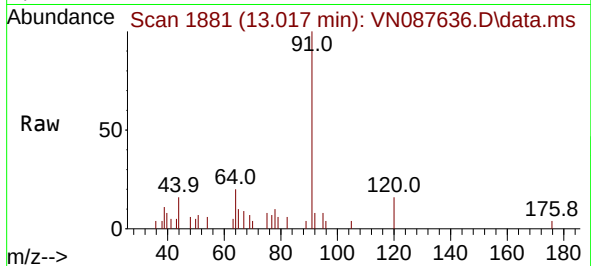




#78
n-propylbenzene
Concen: 0.445 ug/l
RT: 13.017 min Scan# 1880
Delta R.T. 0.006 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

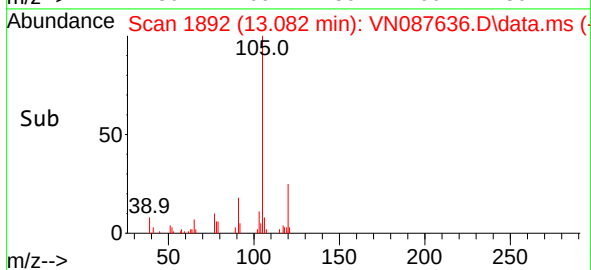
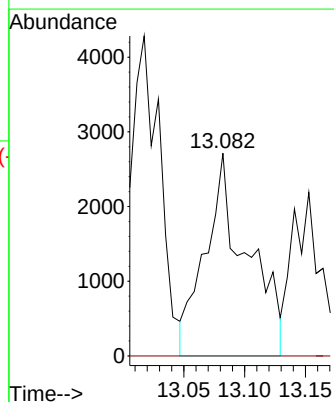
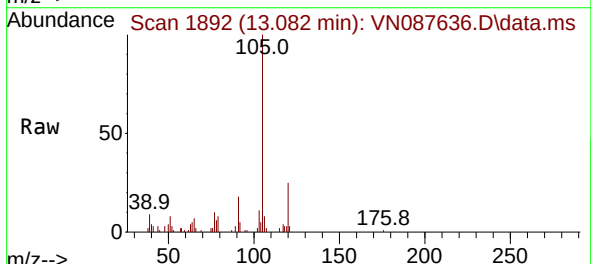
Instrument :
MSVOA_N
ClientSampleId :
MW1

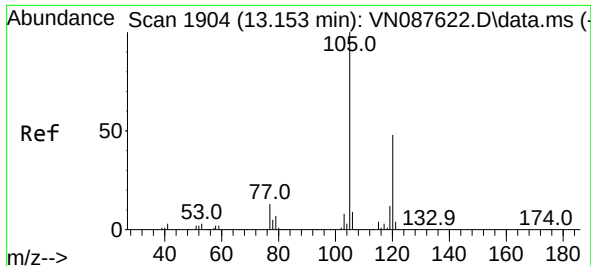
Tgt Ion: 91 Resp: 7771
Ion Ratio Lower Upper
91 100
120 16.3 10.7 32.1



#79
2-Chlorotoluene
Concen: 0.616 ug/l
RT: 13.082 min Scan# 1892
Delta R.T. -0.018 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion: 91 Resp: 6472
Ion Ratio Lower Upper
91 100
126 0.0 16.1 48.3#

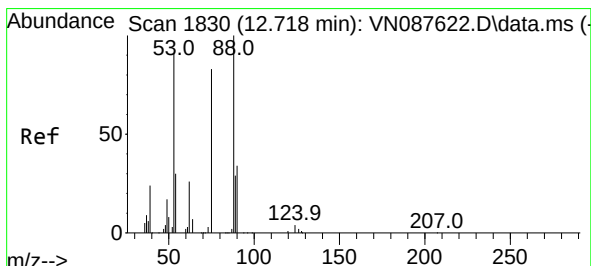
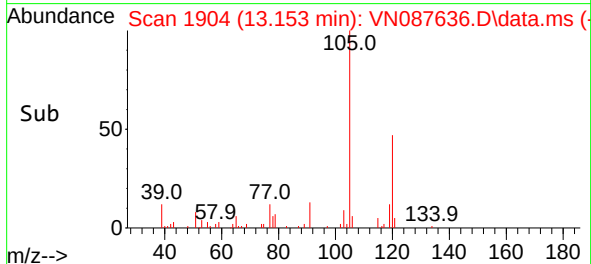
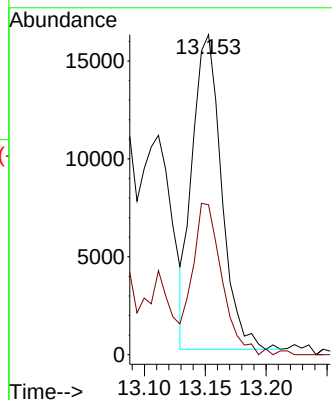
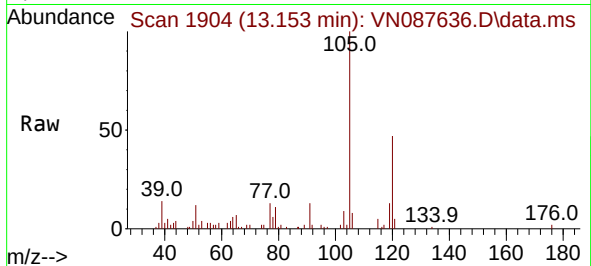




#80
 1,3,5-Trimethylbenzene
 Concen: 2.234 ug/l
 RT: 13.153 min Scan# 1904
 Delta R.T. -0.000 min
 Lab File: VN087636.D
 Acq: 22 Aug 2025 13:19

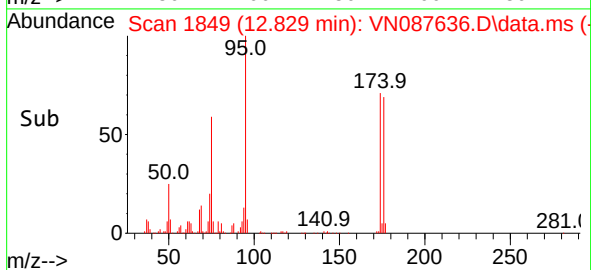
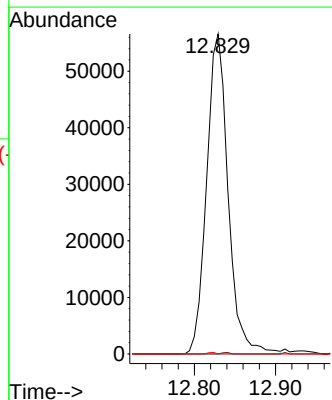
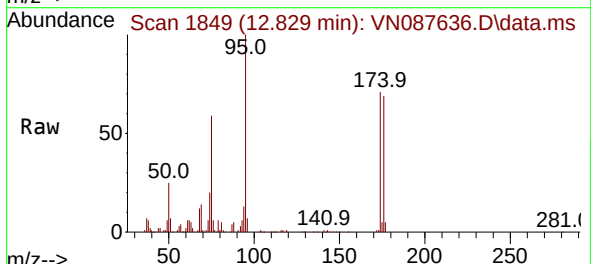
Instrument :
 MSVOA_N
 ClientSampleId :
 MW1

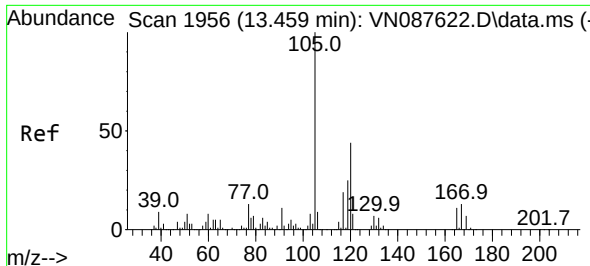
Tgt Ion:105 Resp: 26863
 Ion Ratio Lower Upper
 105 100
 120 48.1 23.2 69.6



#81
 trans-1,4-Dichloro-2-butene
 Concen: 66.923 ug/l
 RT: 12.829 min Scan# 1849
 Delta R.T. 0.112 min
 Lab File: VN087636.D
 Acq: 22 Aug 2025 13:19

Tgt Ion: 75 Resp: 103976
 Ion Ratio Lower Upper
 75 100
 53 0.1 101.8 152.6#
 89 0.2 35.6 53.4#

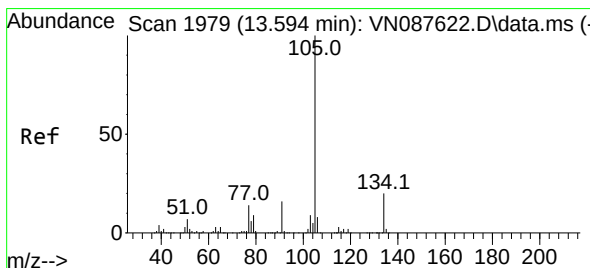
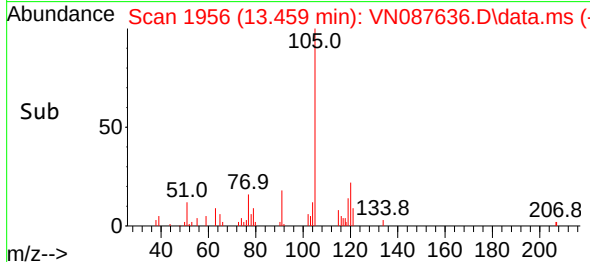
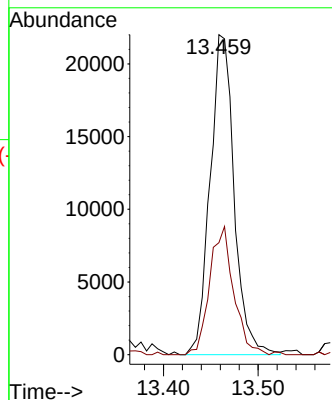
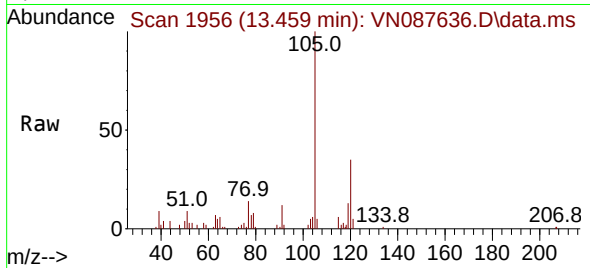




#84
1,2,4-Trimethylbenzene
Concen: 3.232 ug/l
RT: 13.459 min Scan# 1956
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

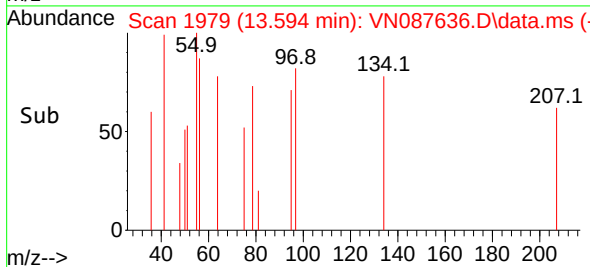
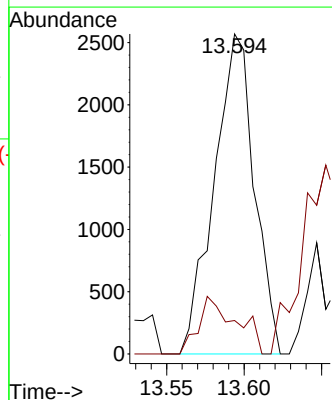
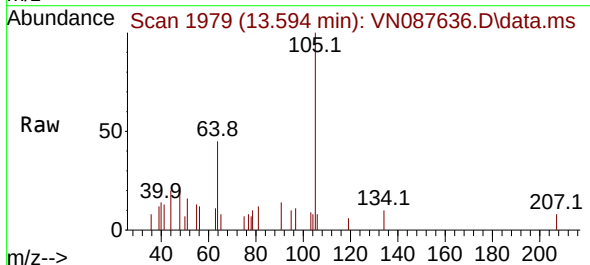
Instrument :
MSVOA_N
ClientSampleId :
MW1

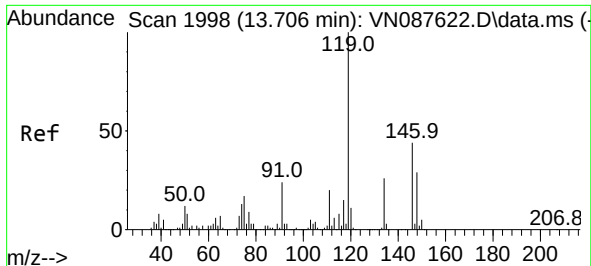
Tgt Ion:105 Resp: 38899
Ion Ratio Lower Upper
105 100
120 39.9 22.0 66.0



#85
sec-Butylbenzene
Concen: 0.312 ug/l
RT: 13.594 min Scan# 1979
Delta R.T. -0.000 min
Lab File: VN087636.D
Acq: 22 Aug 2025 13:19

Tgt Ion:105 Resp: 4633
Ion Ratio Lower Upper
105 100
134 16.8 9.6 28.6

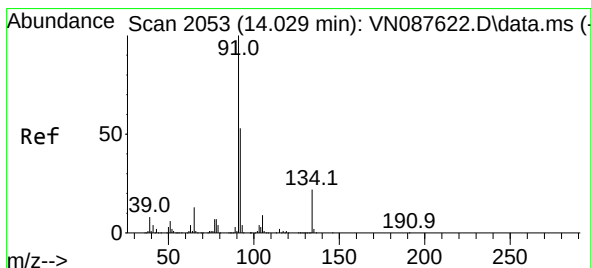
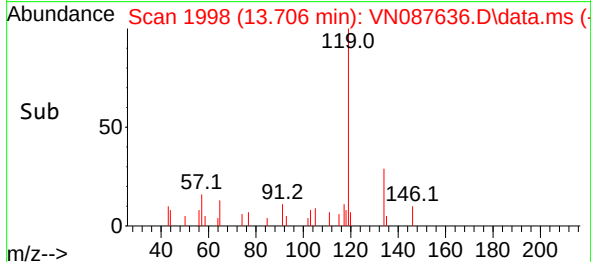
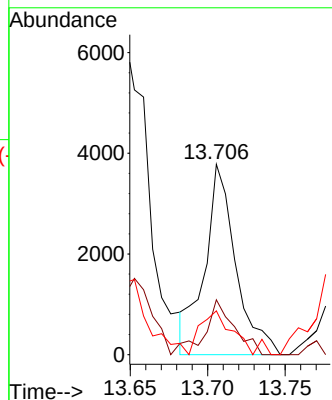
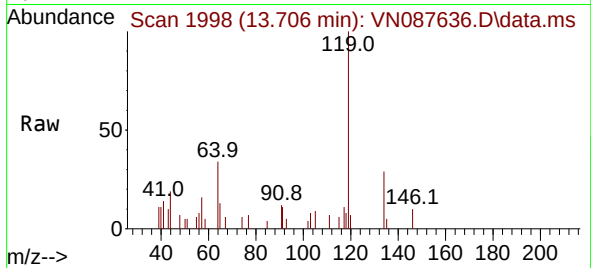




#86
 p-Isopropyltoluene
 Concen: 0.430 ug/l
 RT: 13.706 min Scan# 1998
 Delta R.T. -0.000 min
 Lab File: VN087636.D
 Acq: 22 Aug 2025 13:19

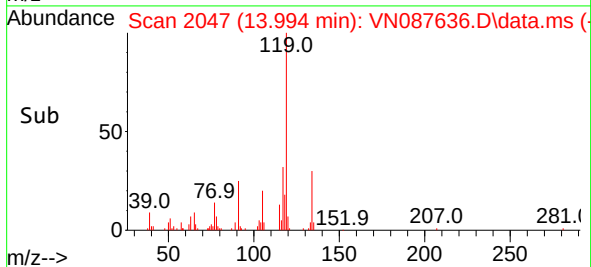
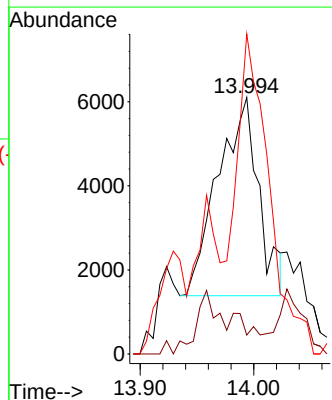
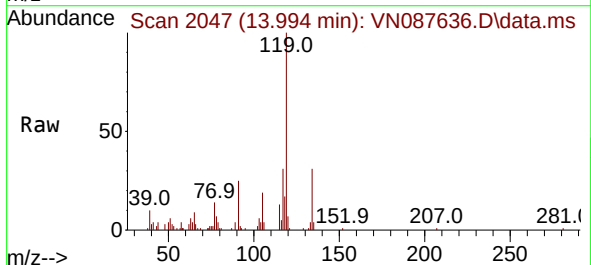
Instrument : MSVOA_N
 ClientSampleId : MW1

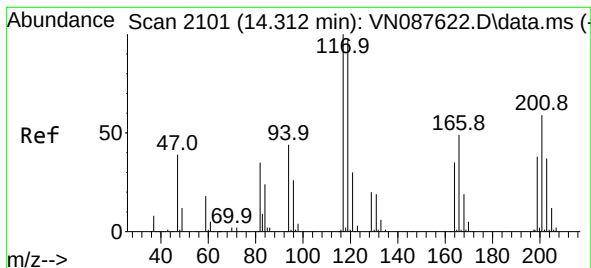
Tgt Ion:	119	Resp:	5284
Ion	Ratio	Lower	Upper
119	100		
134	26.0	12.7	38.0
91	25.0	12.5	37.5



#89
 n-Butylbenzene
 Concen: 0.967 ug/l
 RT: 13.994 min Scan# 2047
 Delta R.T. -0.035 min
 Lab File: VN087636.D
 Acq: 22 Aug 2025 13:19

Tgt Ion:	91	Resp:	11788
Ion	Ratio	Lower	Upper
91	100		
92	0.0	25.9	77.8#
134	132.8	11.7	35.0#





#90

Hexachloroethane

Concen: 1.979 ug/l

RT: 14.306 min Scan# 2100

Delta R.T. -0.006 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

Instrument :

MSVOA_N

ClientSampleId :

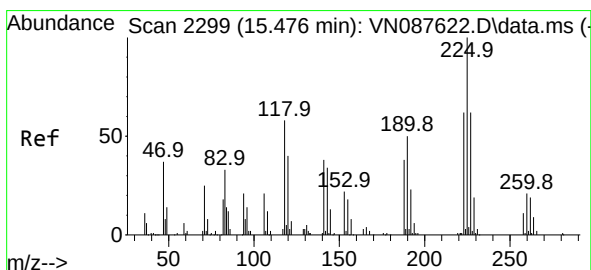
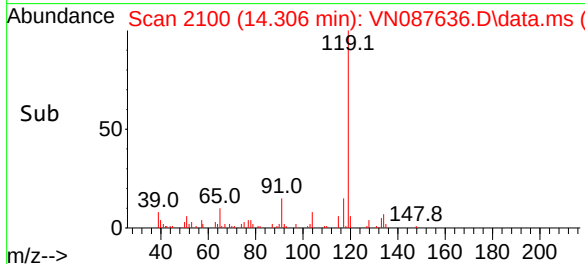
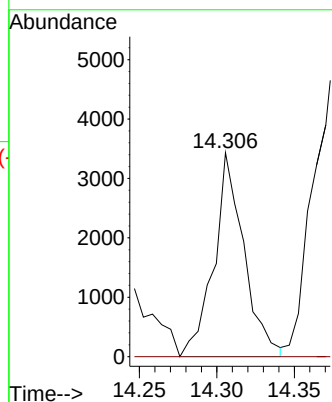
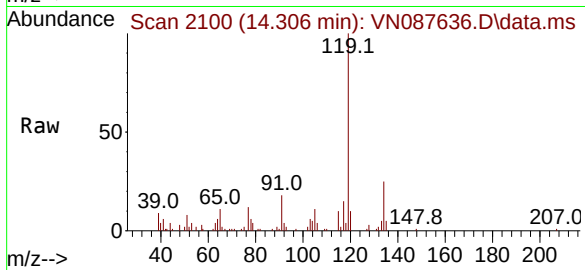
MW1

Tgt Ion:117 Resp: 4629

Ion Ratio Lower Upper

117 100

201 0.0 29.1 87.4#



#94

Hexachlorobutadiene

Concen: 0.344 ug/l

RT: 15.470 min Scan# 2298

Delta R.T. -0.006 min

Lab File: VN087636.D

Acq: 22 Aug 2025 13:19

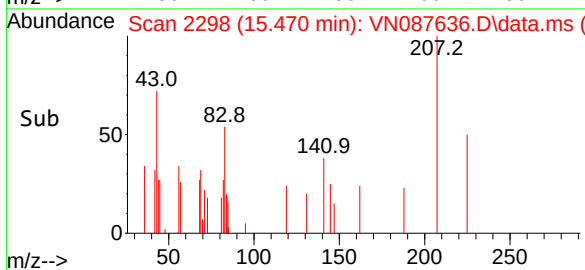
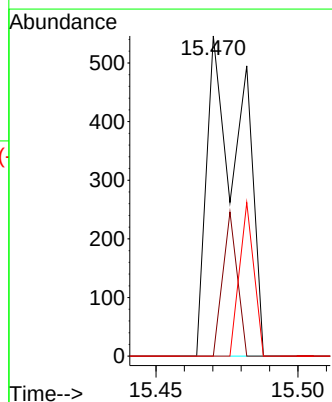
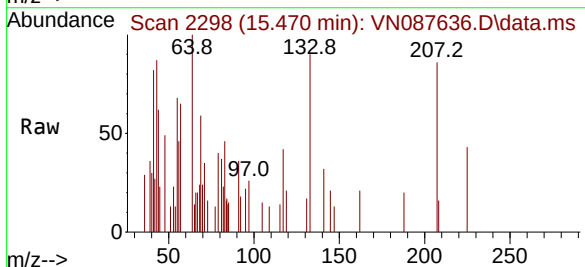
Tgt Ion:225 Resp: 460

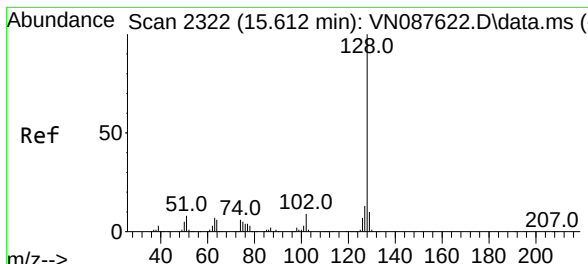
Ion Ratio Lower Upper

225 100

223 18.9 32.0 96.2#

227 20.0 32.1 96.5#





#95
 Naphthalene
 Concen: 0.706 ug/l
 RT: 15.617 min Scan# 21
 Delta R.T. 0.006 min
 Lab File: VN087636.D
 Acq: 22 Aug 2025 13:19

Instrument :
 MSVOA_N
 ClientSampleId :
 MW1

Tgt Ion:	128	Resp:	9378
Ion	Ratio	Lower	Upper
128	100		
127	19.5	10.6	15.8#
129	13.2	8.6	12.8#

