

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082825\
 Data File : VN087687.D
 Acq On : 28 Aug 2025 15:50
 Operator : JC\MD
 Sample : Q2977-01 50X
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 33125

Quant Time: Aug 29 03:20:09 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)

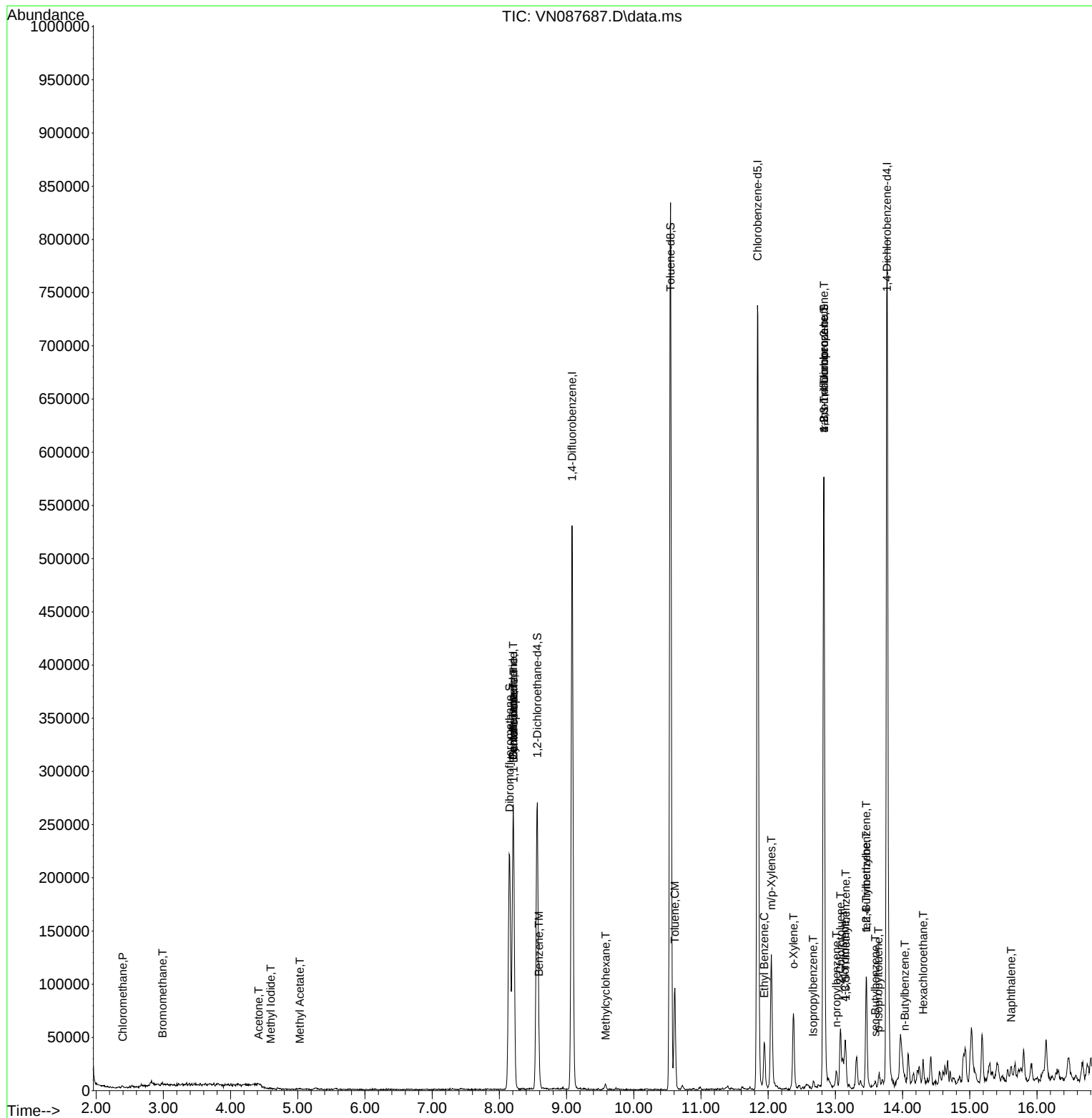
Internal Standards						
1) Pentafluorobenzene	8.206	168	172931	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	423081	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	409383	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	198067	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.565	65	223380	63.045	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 126.100%#			
35) Dibromofluoromethane	8.153	113	158784	51.981	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.960%			
50) Toluene-d8	10.547	98	548927	48.013	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 96.020%			
62) 4-Bromofluorobenzene	12.829	95	199834	49.149	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 98.300%			
Target Compounds						Qvalue
3) Chloromethane	2.395	50	2188	0.867	ug/l #	79
5) Bromomethane	2.989	94	313	0.207	ug/l #	51
10) Methyl Iodide	4.600	142	163	6.888	ug/l #	38
16) Acetone	4.418	43	1340	0.695	ug/l #	74
18) Methyl Acetate	5.030	43	1016	0.252	ug/l #	54
20) Methylene Chloride	5.253	84	768	Below Cal	#	48
31) Cyclohexane	8.206	56	5609	1.259	ug/l #	1
36) 1,1-Dichloropropene	8.212	75	17134	3.656	ug/l #	52
38) Carbon Tetrachloride	8.206	117	20697	4.473	ug/l #	16
39) Methylcyclohexane	9.582	83	1371	0.266	ug/l #	74
40) Benzene	8.588	78	6673	0.464	ug/l	96
52) Toluene	10.612	92	38208	4.288	ug/l	98
67) Ethyl Benzene	11.941	91	32604	1.849	ug/l	90
68) m/p-Xylenes	12.047	106	33589	5.194	ug/l	92
69) o-Xylene	12.376	106	20117	3.174	ug/l	96
73) Isopropylbenzene	12.671	105	5004	0.313	ug/l	96
76) 1,2,3-Trichloropropane	12.829	75	115788	24.929	ug/l #	1
78) n-propylbenzene	13.018	91	14036	0.712	ug/l	94
79) 2-Chlorotoluene	13.076	91	2783	0.235	ug/l #	42
80) 1,3,5-Trimethylbenzene	13.153	105	16601	1.223	ug/l	90
81) trans-1,4-Dichloro-2-b...	12.829	75	115788	65.996	ug/l #	1
82) 4-Chlorotoluene	13.141	91	2607	0.209	ug/l #	43
83) tert-Butylbenzene	13.459	119	7886	0.697	ug/l #	73
84) 1,2,4-Trimethylbenzene	13.459	105	63087	4.642	ug/l	94
85) sec-Butylbenzene	13.594	105	4056	0.242	ug/l	92
86) p-Isopropyltoluene	13.641	119	4585	0.331	ug/l	93
89) n-Butylbenzene	14.035	91	4874	0.354	ug/l #	82
90) Hexachloroethane	14.306	117	1925	0.729	ug/l #	22
95) Naphthalene	15.617	128	13884	0.926	ug/l #	90

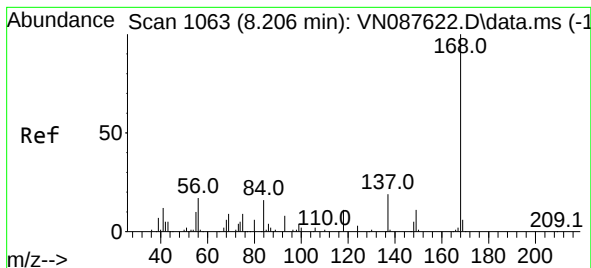
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Aug 29 03:20:09 2025
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Quant Title : SW846 8260
QLast Update : Fri Aug 22 02:55:42 2025
Response via : Initial Calibration

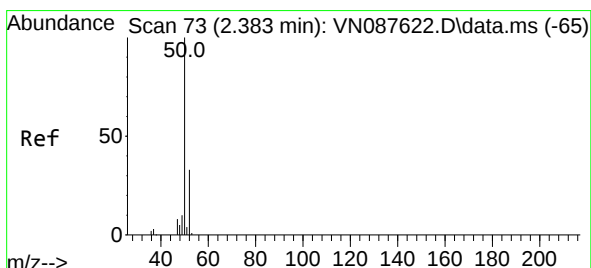
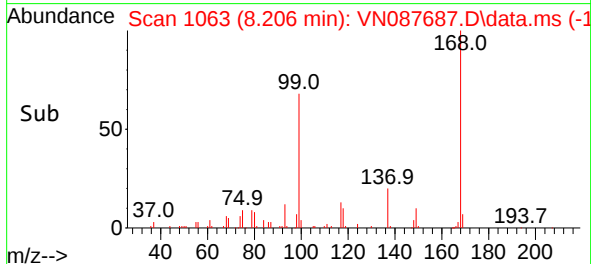
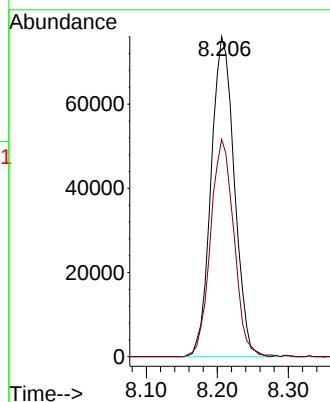
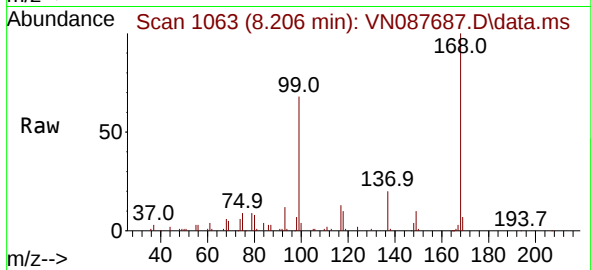




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. 0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

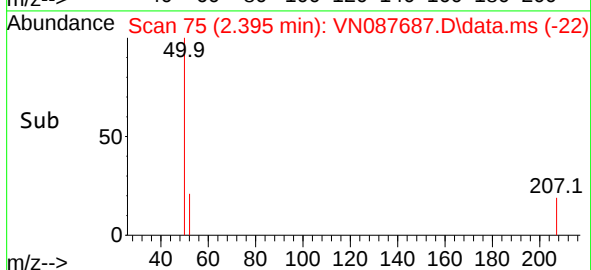
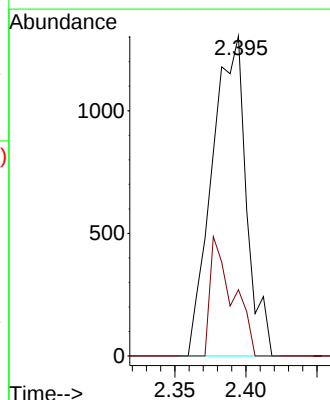
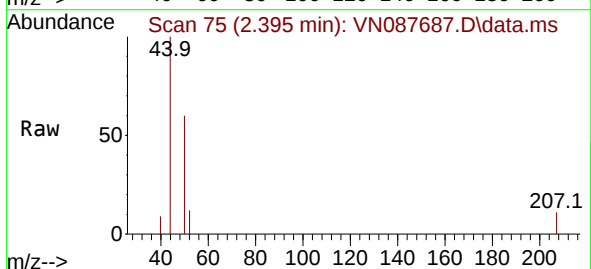
Instrument :
MSVOA_N
ClientSampleId :
33125

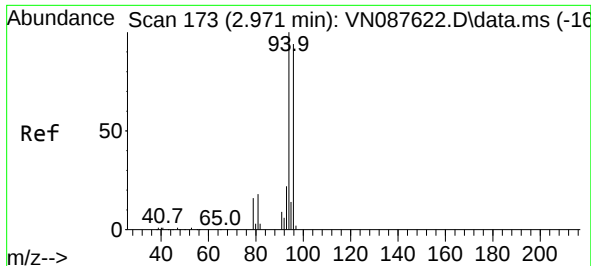
Tgt Ion:168 Resp: 172931
Ion Ratio Lower Upper
168 100
99 67.9 57.2 85.8



#3
Chloromethane
Concen: 0.867 ug/l
RT: 2.395 min Scan# 75
Delta R.T. 0.012 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 50 Resp: 2188
Ion Ratio Lower Upper
50 100
52 20.7 26.2 39.4#

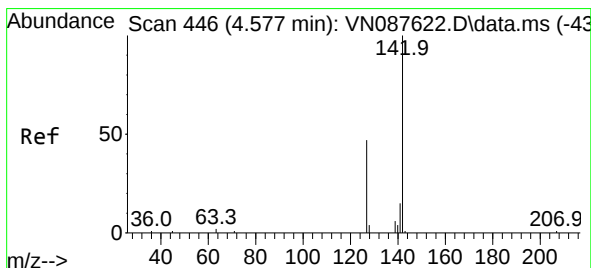
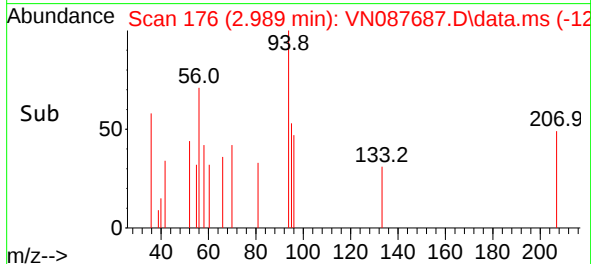
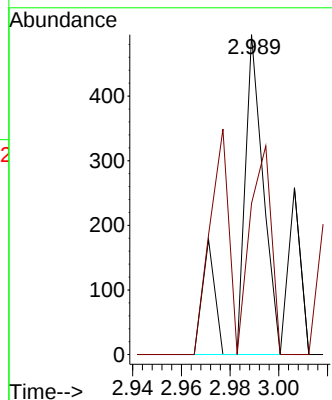
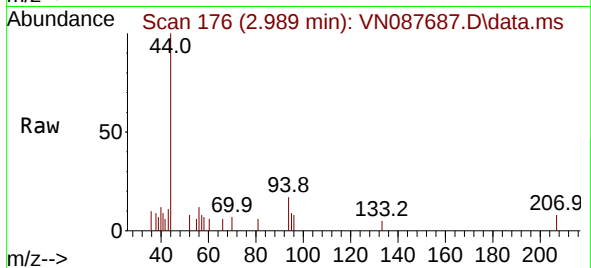




#5
Bromomethane
Concen: 0.207 ug/l
RT: 2.989 min Scan# 11
Delta R.T. 0.018 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

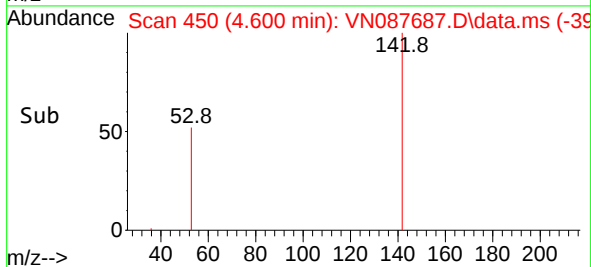
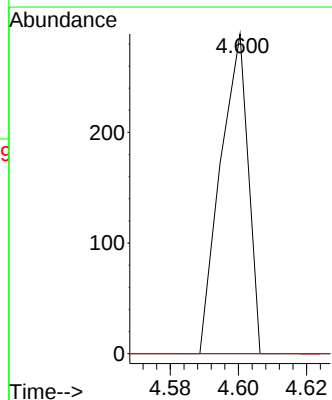
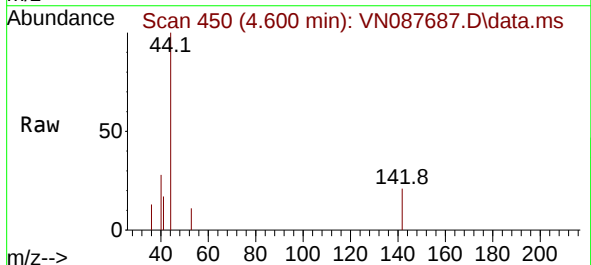
Instrument :
MSVOA_N
ClientSampleId :
33125

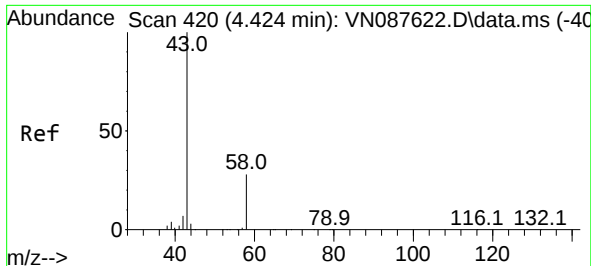
Tgt Ion: 94 Resp: 313
Ion Ratio Lower Upper
94 100
96 47.3 75.4 113.2#



#10
Methyl Iodide
Concen: 6.888 ug/l
RT: 4.600 min Scan# 450
Delta R.T. 0.023 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion:142 Resp: 163
Ion Ratio Lower Upper
142 100
127 0.0 38.0 57.0#
141 0.0 12.0 18.0#

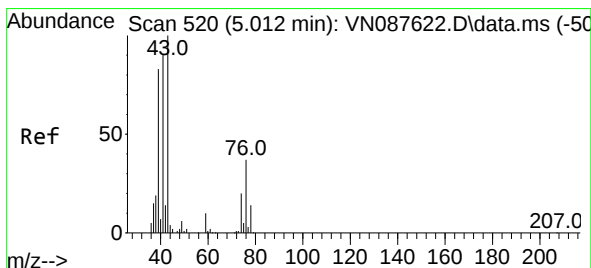
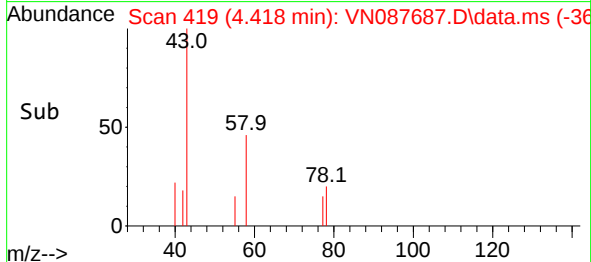
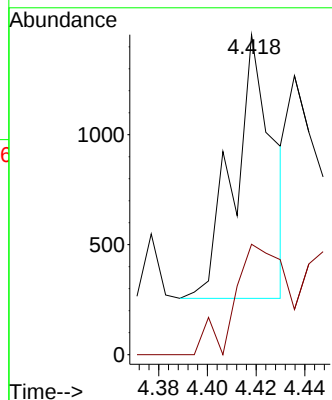
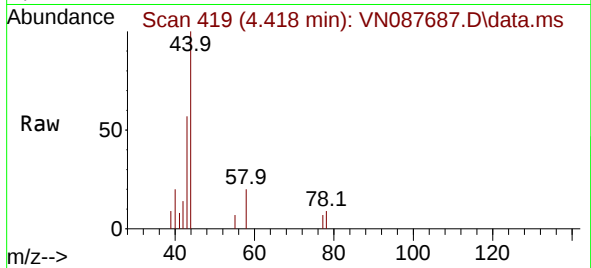




#16
Acetone
Concen: 0.695 ug/l
RT: 4.418 min Scan# 41
Delta R.T. -0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

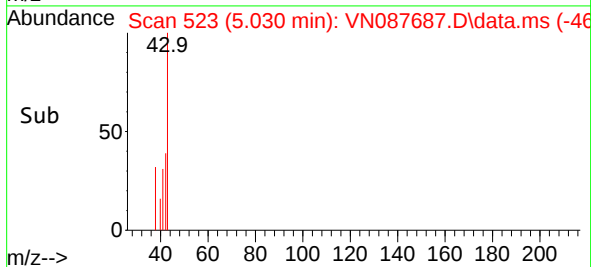
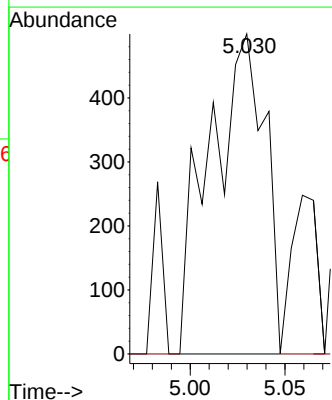
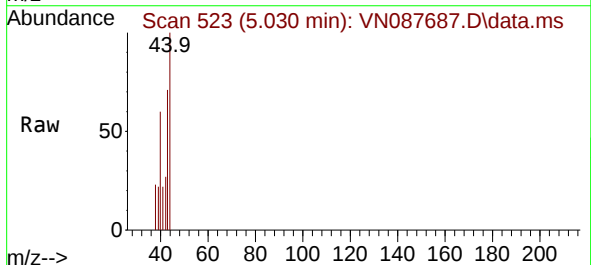
Instrument :
MSVOA_N
ClientSampleId :
33125

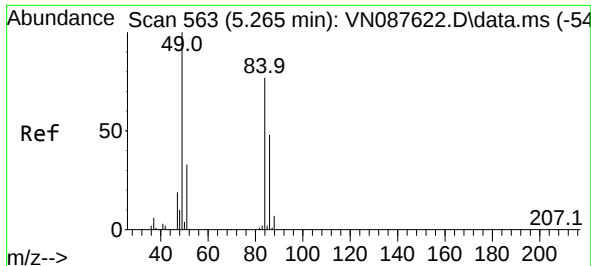
Tgt Ion: 43 Resp: 1340
Ion Ratio Lower Upper
43 100
58 41.9 22.6 33.8#



#18
Methyl Acetate
Concen: 0.252 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.018 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 43 Resp: 1016
Ion Ratio Lower Upper
43 100
74 0.0 17.6 26.4#

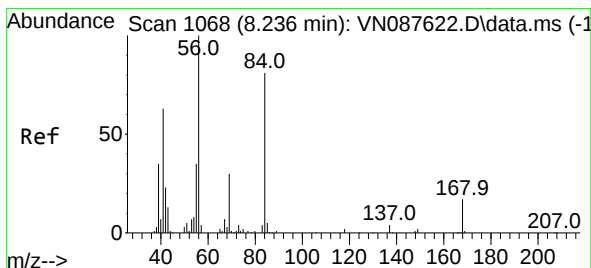
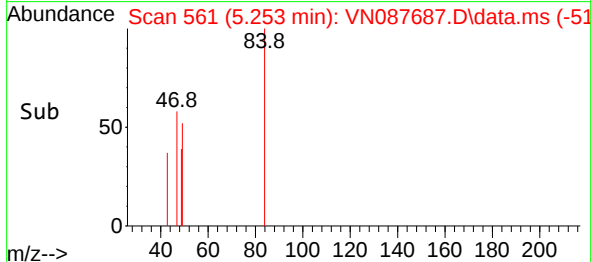
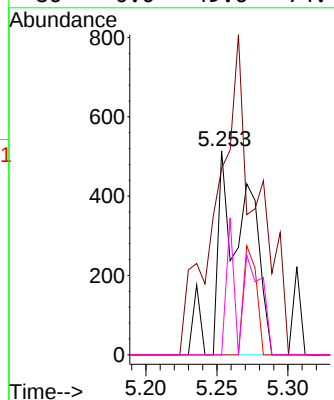
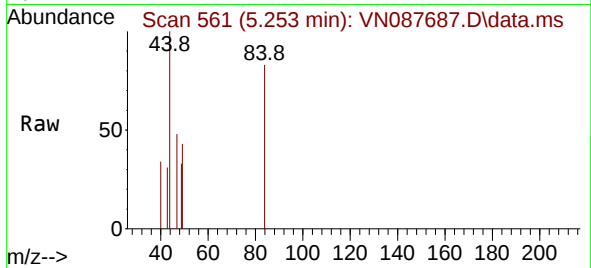




#20
Methylene Chloride
Concen: Below Cal
RT: 5.253 min Scan# 51
Delta R.T. -0.012 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

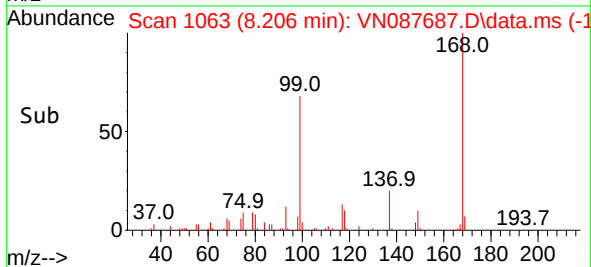
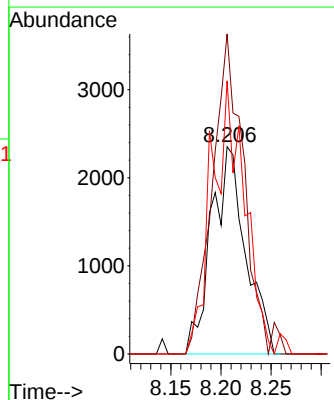
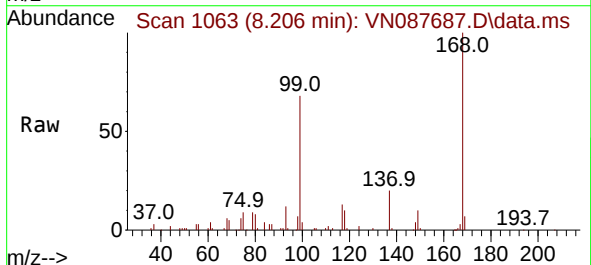
Instrument :
MSVOA_N
ClientSampleId :
33125

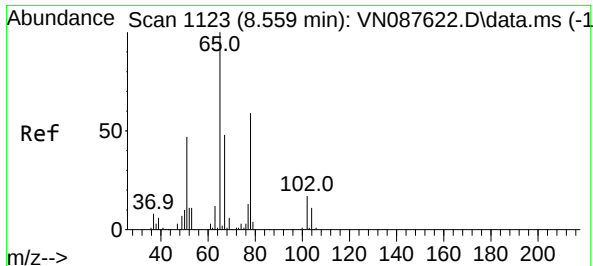
Tgt Ion:	84	Resp:	768
Ion	Ratio	Lower	Upper
84	100		
49	91.4	103.4	155.2#
51	0.0	33.8	50.8#
86	0.0	49.6	74.4#



#31
Cyclohexane
Concen: 1.259 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.029 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion:	56	Resp:	5609
Ion	Ratio	Lower	Upper
56	100		
69	154.5	23.7	35.5#
84	131.9	64.7	97.1#





#33

1,2-Dichloroethane-d4

Concen: 63.045 ug/l

RT: 8.565 min Scan# 1123

Delta R.T. 0.006 min

Lab File: VN087687.D

Acq: 28 Aug 2025 15:50

Instrument :

MSVOA_N

ClientSampleId :

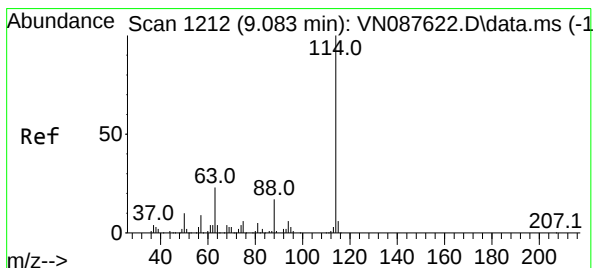
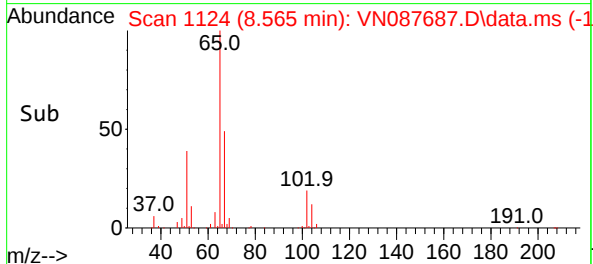
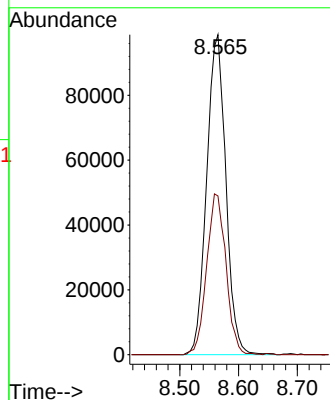
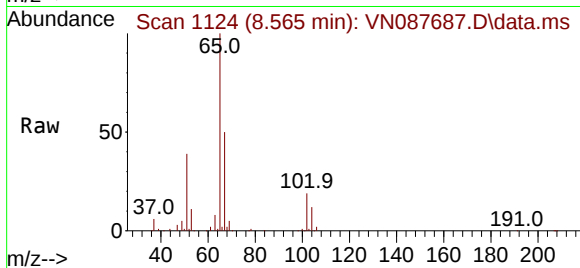
33125

Tgt Ion: 65 Resp: 223380

Ion Ratio Lower Upper

65 100

67 50.5 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: VN087687.D

Acq: 28 Aug 2025 15:50

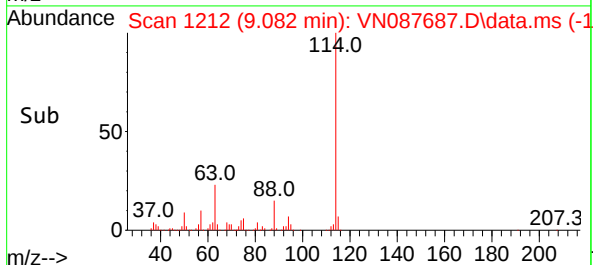
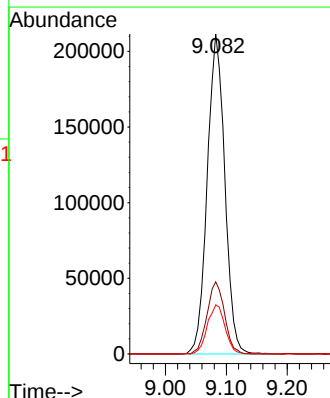
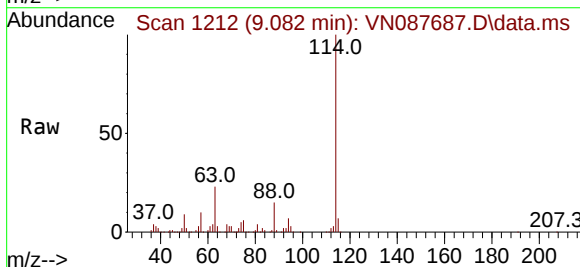
Tgt Ion: 114 Resp: 423081

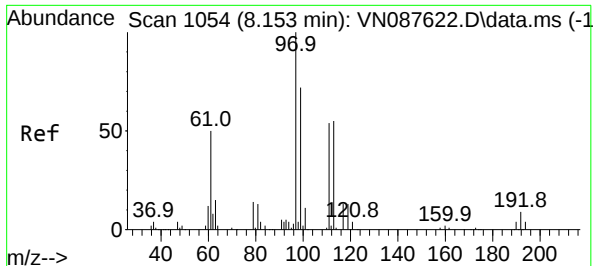
Ion Ratio Lower Upper

114 100

63 22.5 0.0 45.2

88 15.3 0.0 33.4

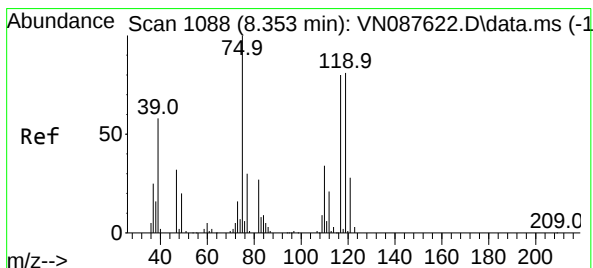
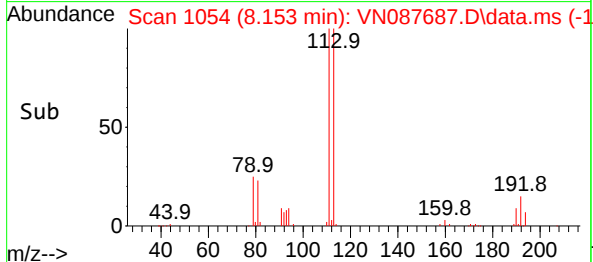
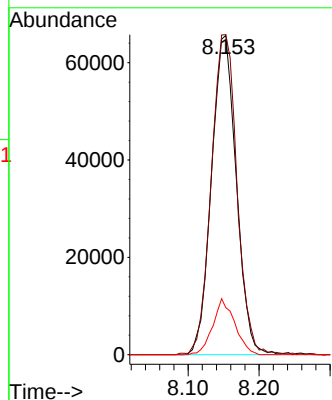
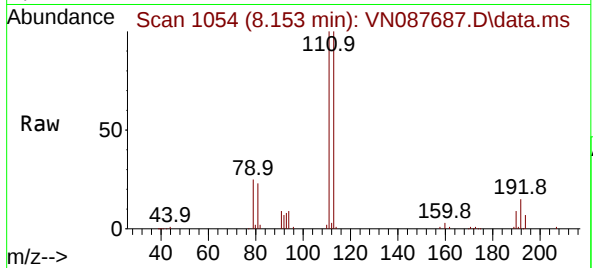




#35
Dibromofluoromethane
Concen: 51.981 ug/l
RT: 8.153 min Scan# 1064
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

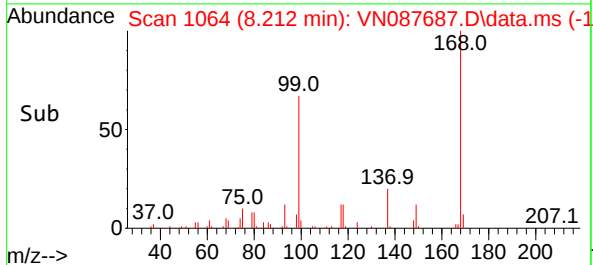
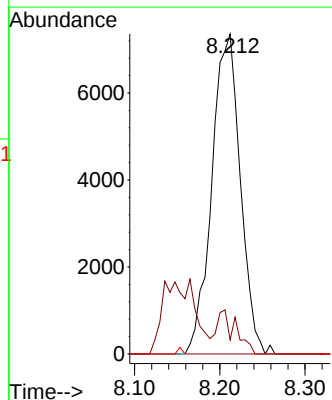
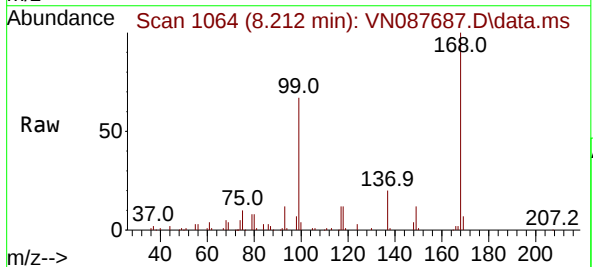
Instrument :
MSVOA_N
ClientSampleId :
33125

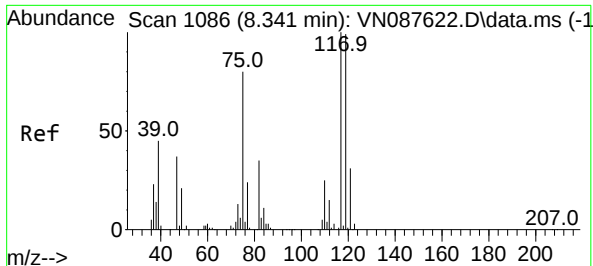
Tgt Ion:113 Resp: 158784
Ion Ratio Lower Upper
113 100
111 103.8 82.8 124.2
192 15.6 12.8 19.2



#36
1,1-Dichloropropene
Concen: 3.656 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. -0.141 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 75 Resp: 17134
Ion Ratio Lower Upper
75 100
110 9.2 15.9 47.6#
77 0.0 24.4 36.6#

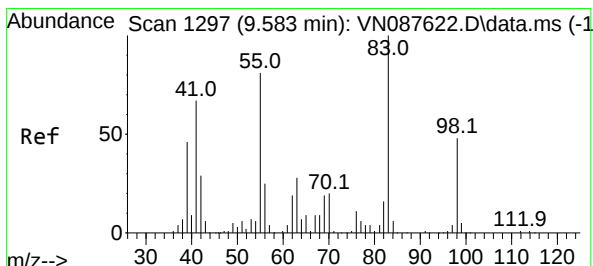
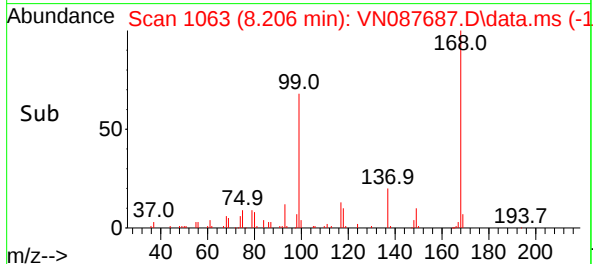
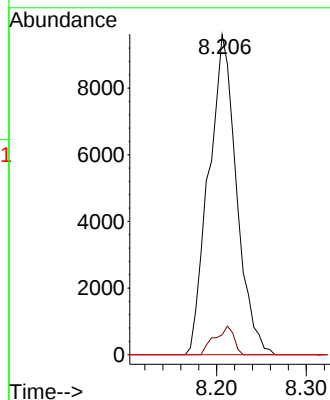
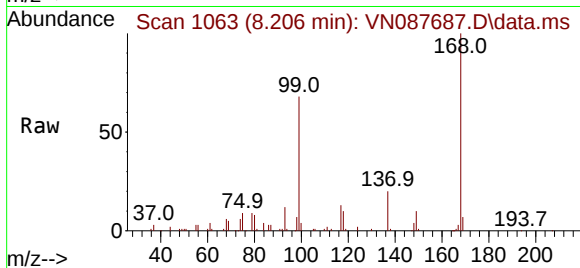




#38
Carbon Tetrachloride
Concen: 4.473 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.135 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

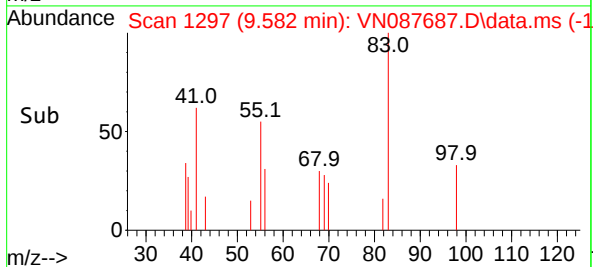
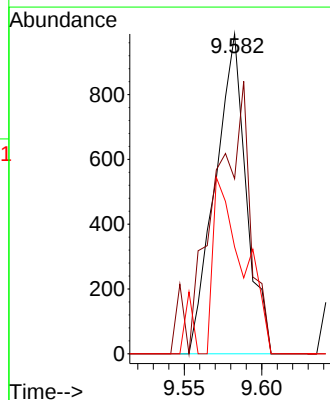
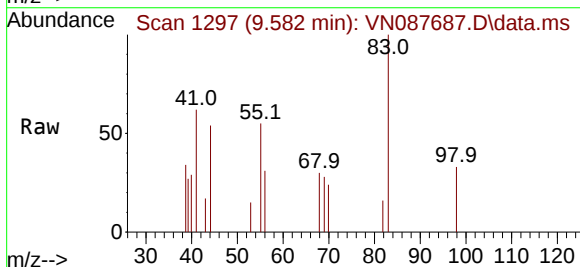
Instrument :
MSVOA_N
ClientSampleId :
33125

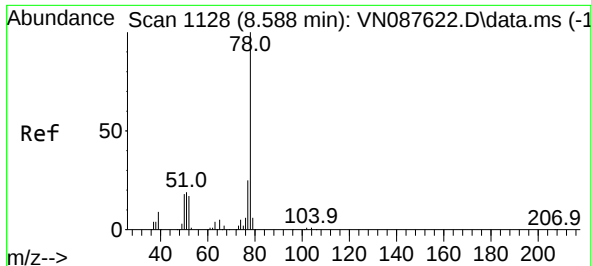
Tgt Ion:117 Resp: 20697
Ion Ratio Lower Upper
117 100
119 6.2 79.0 118.6#
121 0.0 25.0 37.6#



#39
Methylcyclohexane
Concen: 0.266 ug/l
RT: 9.582 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 83 Resp: 1371
Ion Ratio Lower Upper
83 100
55 54.7 64.6 96.8#
98 33.4 38.4 57.6#

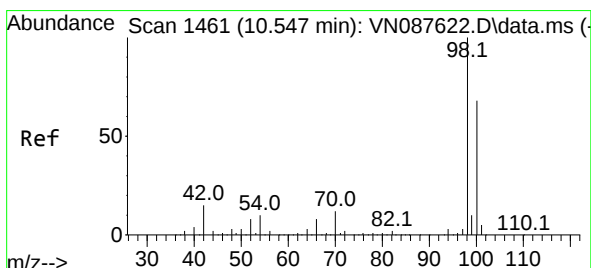
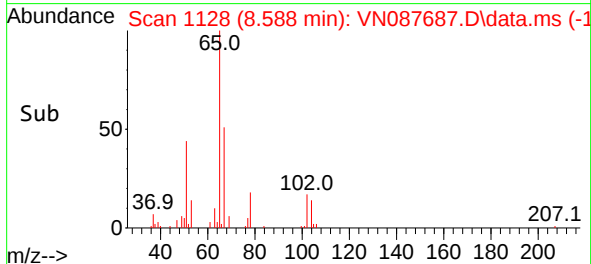
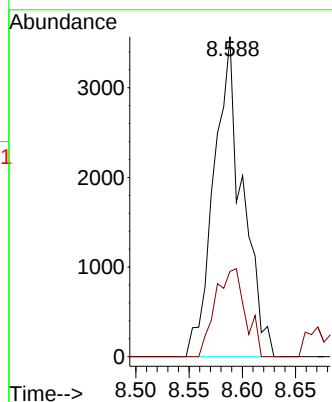
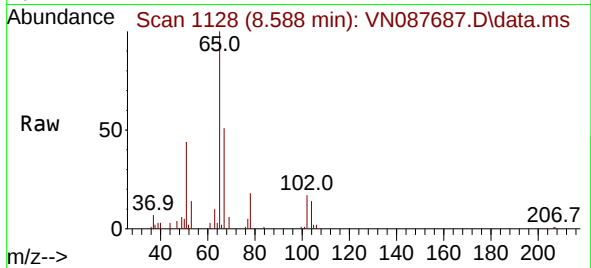




#40
Benzene
Concen: 0.464 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

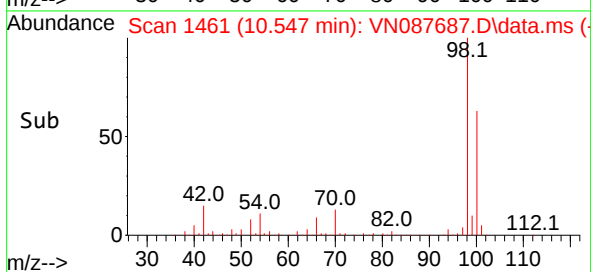
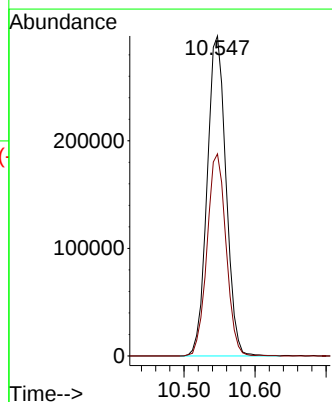
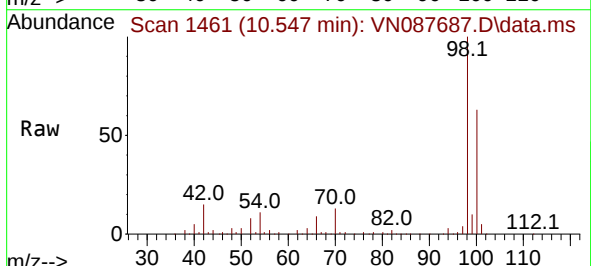
Instrument :
MSVOA_N
ClientSampleId :
33125

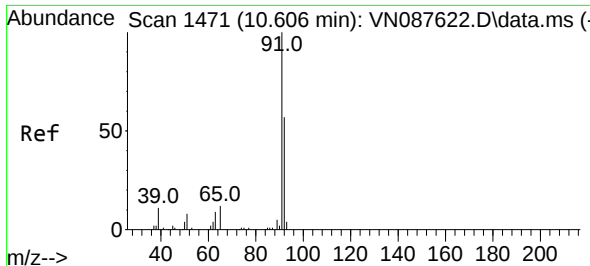
Tgt Ion: 78 Resp: 6673
Ion Ratio Lower Upper
78 100
77 26.6 19.7 29.5



#50
Toluene-d8
Concen: 48.013 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 98 Resp: 548927
Ion Ratio Lower Upper
98 100
100 63.7 52.8 79.2

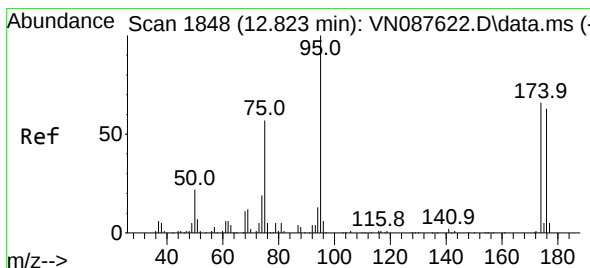
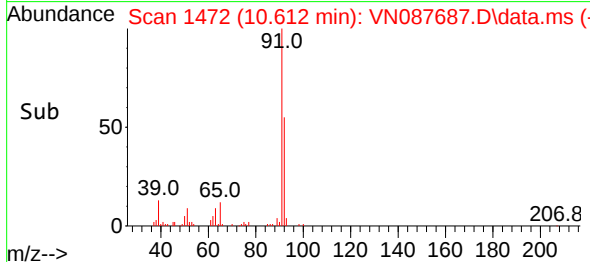
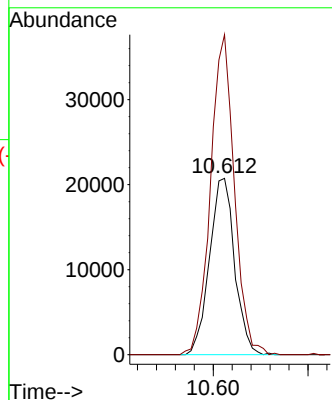
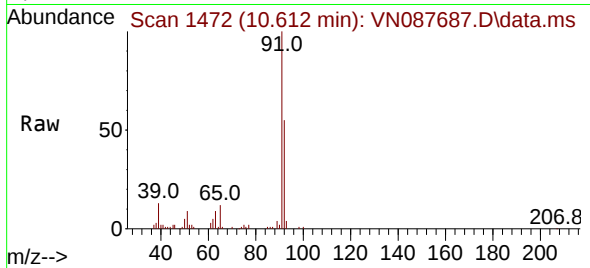




#52
Toluene
Concen: 4.288 ug/l
RT: 10.612 min Scan# 1471
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

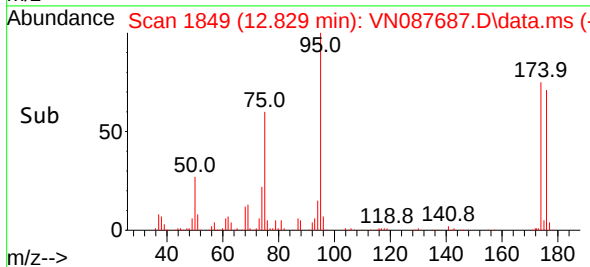
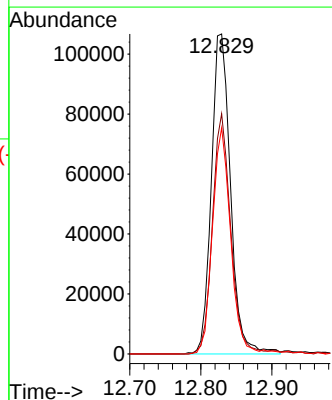
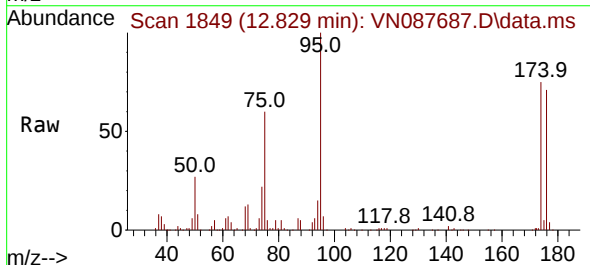
Instrument :
MSVOA_N
ClientSampleId :
33125

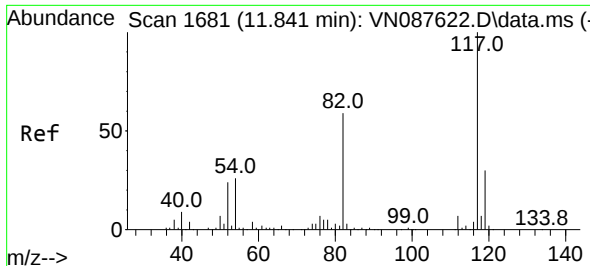
Tgt Ion: 92 Resp: 38208
Ion Ratio Lower Upper
92 100
91 172.2 140.4 210.6



#62
4-Bromofluorobenzene
Concen: 49.149 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 95 Resp: 199834
Ion Ratio Lower Upper
95 100
174 71.5 0.0 138.4
176 66.6 0.0 132.6

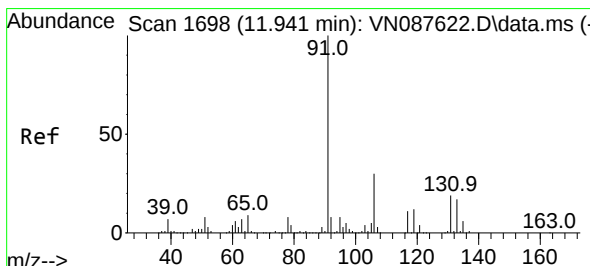
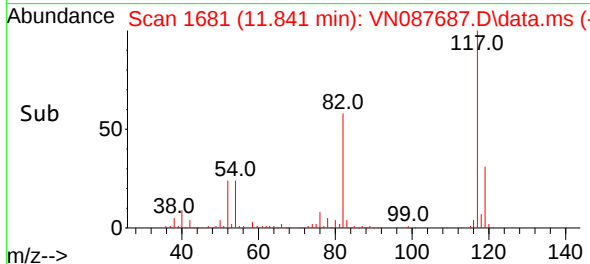
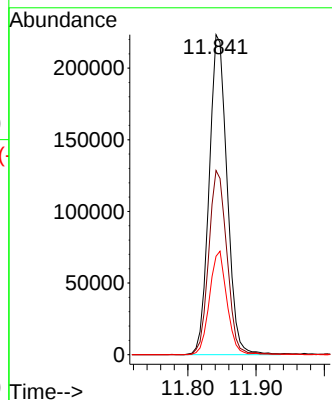
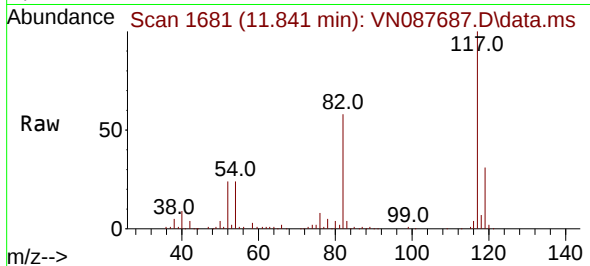




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 1681
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

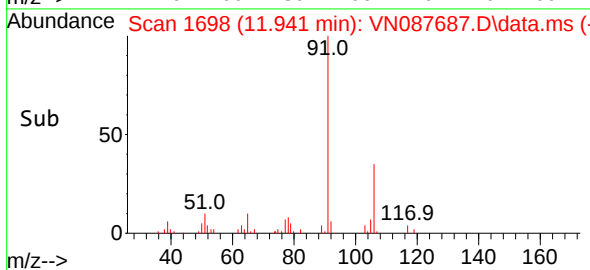
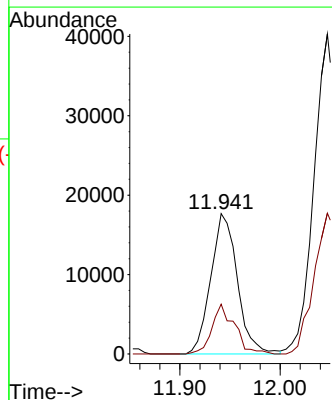
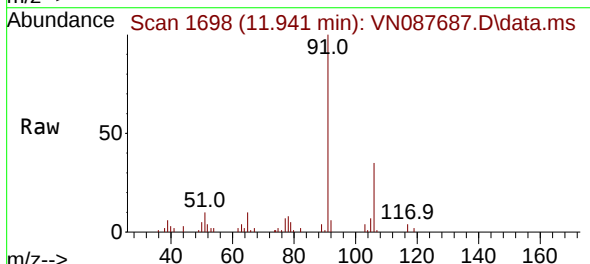
Instrument :
MSVOA_N
ClientSampleId :
33125

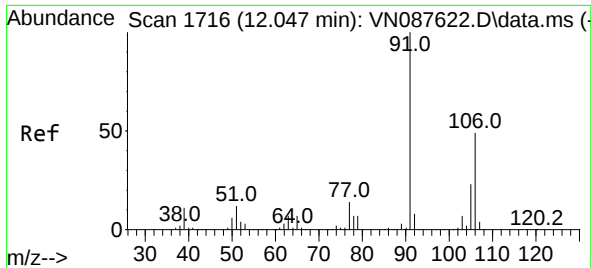
Tgt Ion:117 Resp: 409383
Ion Ratio Lower Upper
117 100
82 57.5 47.4 71.2
119 30.8 24.3 36.5



#67
Ethyl Benzene
Concen: 1.849 ug/l
RT: 11.941 min Scan# 1698
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 91 Resp: 32604
Ion Ratio Lower Upper
91 100
106 35.5 24.1 36.1

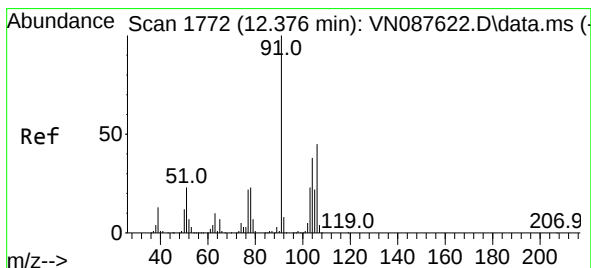
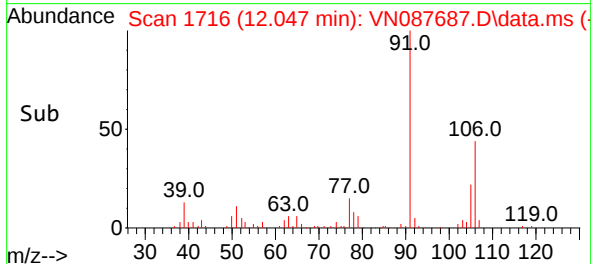
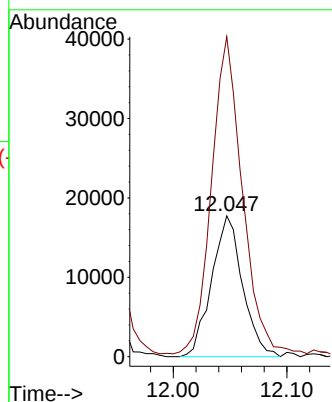
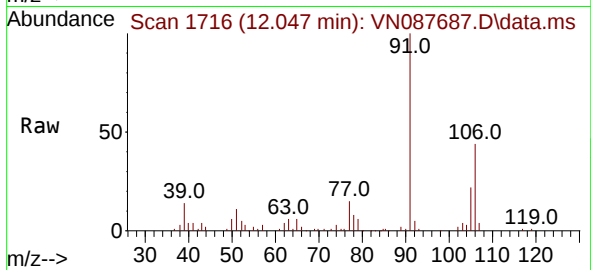




#68
m/p-Xylenes
Concen: 5.194 ug/l
RT: 12.047 min Scan# 1716
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

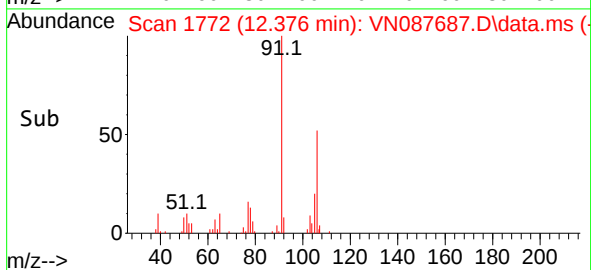
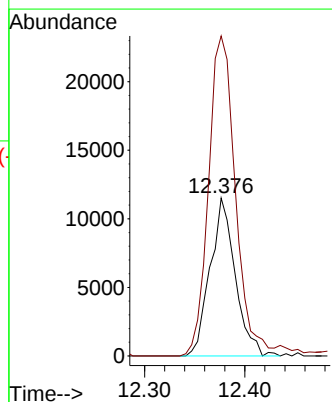
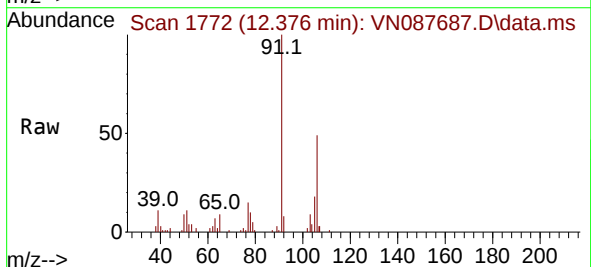
Instrument :
MSVOA_N
ClientSampleId :
33125

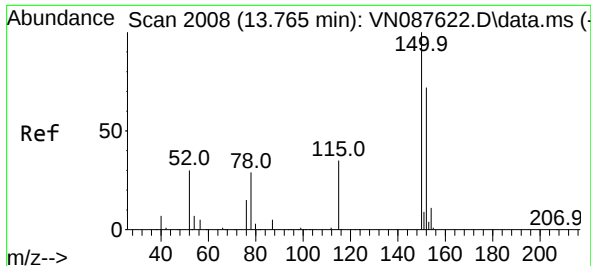
Tgt Ion:106 Resp: 33589
Ion Ratio Lower Upper
106 100
91 224.4 169.3 253.9



#69
o-Xylene
Concen: 3.174 ug/l
RT: 12.376 min Scan# 1772
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion:106 Resp: 20117
Ion Ratio Lower Upper
106 100
91 216.5 111.4 334.2

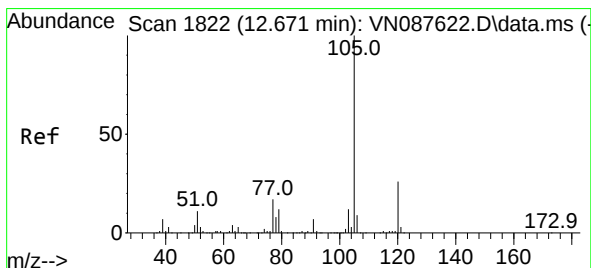
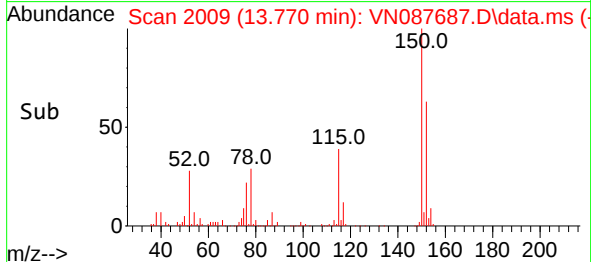
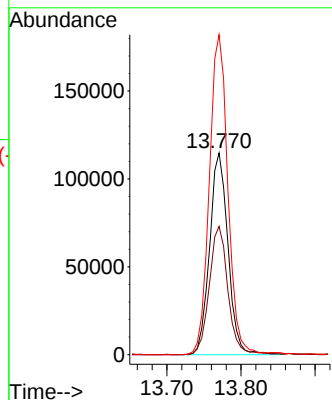
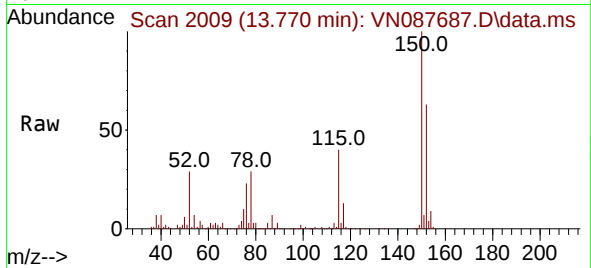




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2008
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

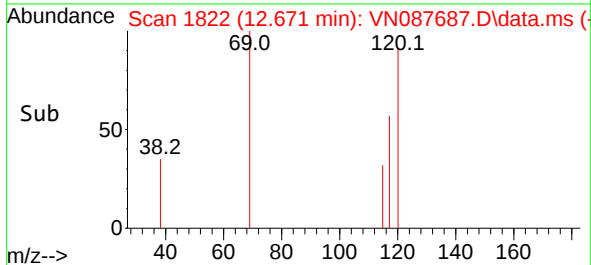
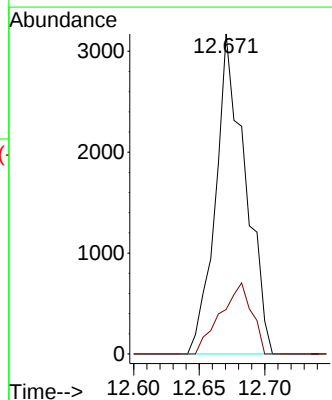
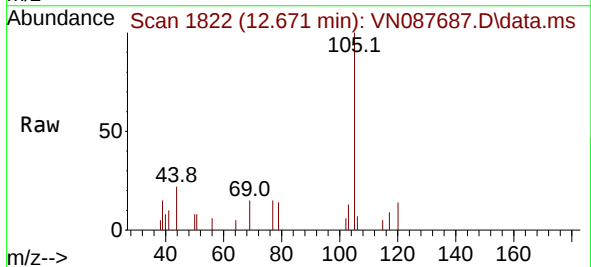
Instrument :
MSVOA_N
ClientSampleId :
33125

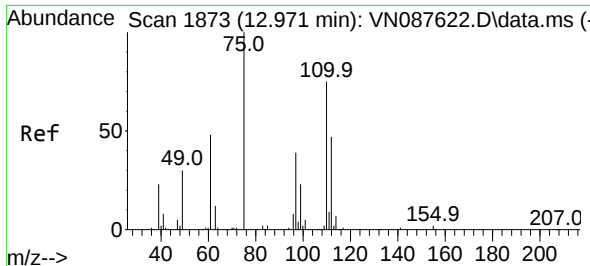
Tgt Ion:152 Resp: 198067
Ion Ratio Lower Upper
152 100
115 64.7 32.3 96.8
150 159.6 0.0 351.0



#73
Isopropylbenzene
Concen: 0.313 ug/l
RT: 12.671 min Scan# 1822
Delta R.T. -0.000 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion:105 Resp: 5004
Ion Ratio Lower Upper
105 100
120 23.3 12.8 38.3

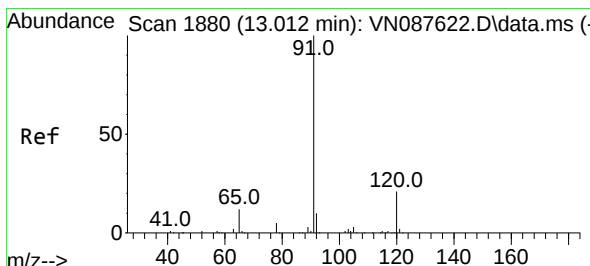
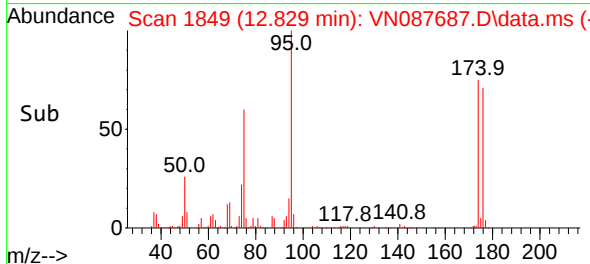
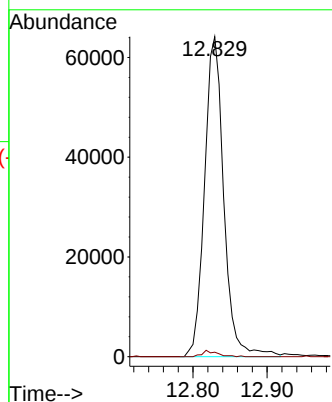
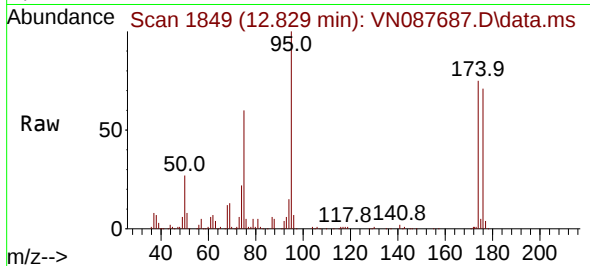




#76
1,2,3-Trichloropropane
Concen: 24.929 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.141 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

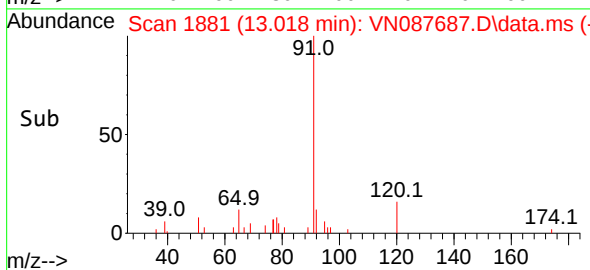
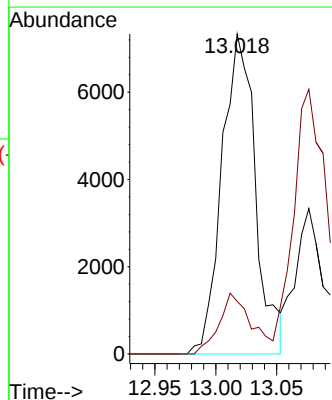
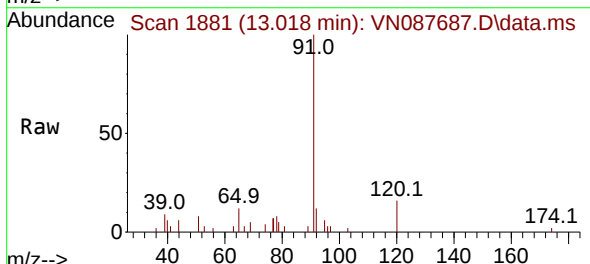
Instrument :
MSVOA_N
ClientSampleId :
33125

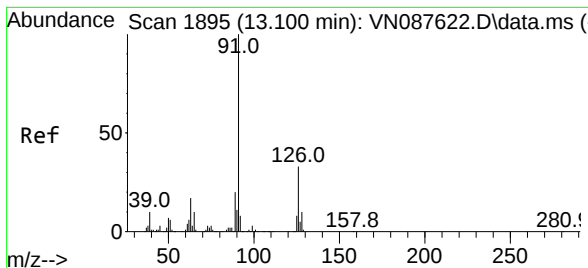
Tgt Ion: 75 Resp: 115788
Ion Ratio Lower Upper
75 100
77 1.5 89.1 267.4#



#78
n-propylbenzene
Concen: 0.712 ug/l
RT: 13.018 min Scan# 1881
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 91 Resp: 14036
Ion Ratio Lower Upper
91 100
120 18.6 10.7 32.1





#79

2-Chlorotoluene

Concen: 0.235 ug/l

RT: 13.076 min Scan# 1891

Delta R.T. -0.024 min

Lab File: VN087687.D

Acq: 28 Aug 2025 15:50

Instrument :

MSVOA_N

ClientSampleId :

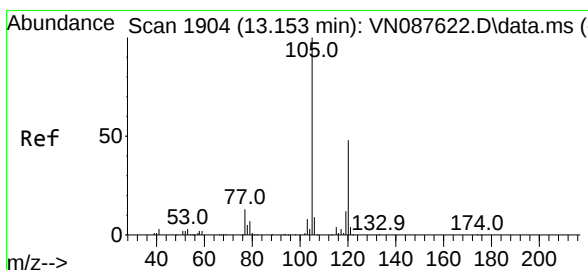
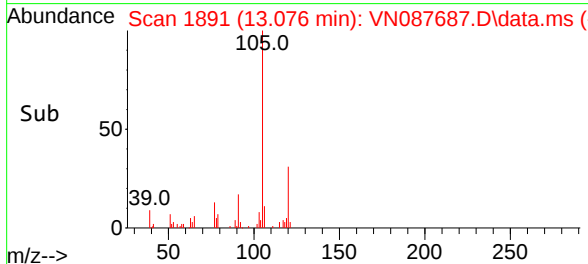
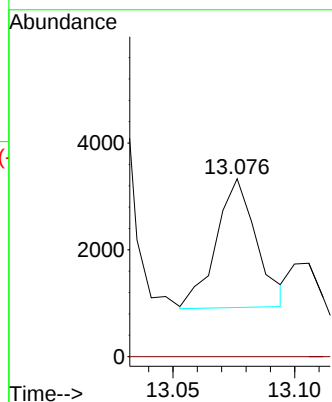
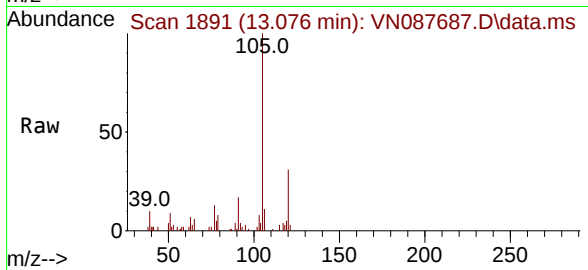
33125

Tgt Ion: 91 Resp: 2783

Ion Ratio Lower Upper

91 100

126 0.0 16.1 48.3#



#80

1,3,5-Trimethylbenzene

Concen: 1.223 ug/l

RT: 13.153 min Scan# 1904

Delta R.T. -0.000 min

Lab File: VN087687.D

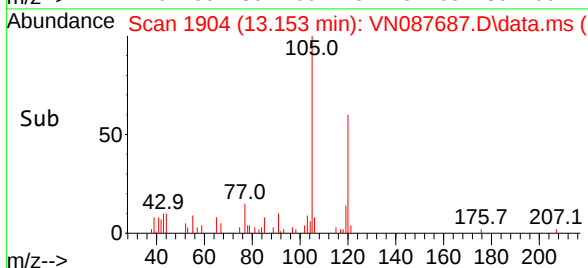
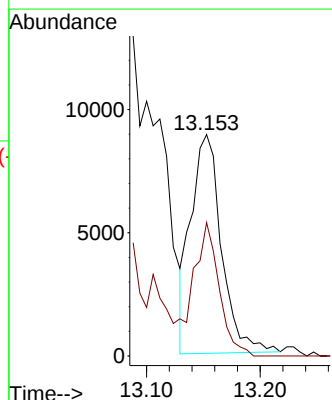
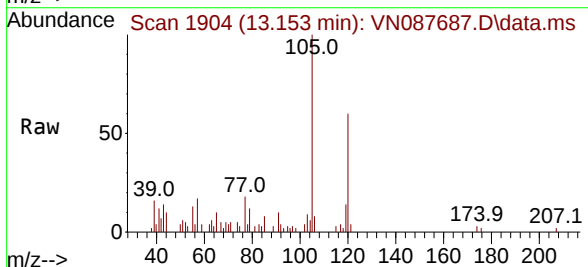
Acq: 28 Aug 2025 15:50

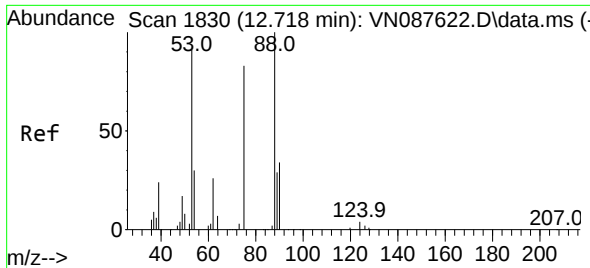
Tgt Ion: 105 Resp: 16601

Ion Ratio Lower Upper

105 100

120 52.9 23.2 69.6

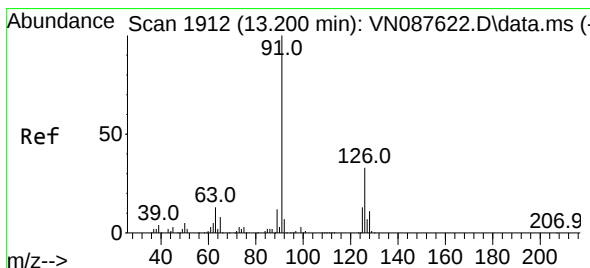
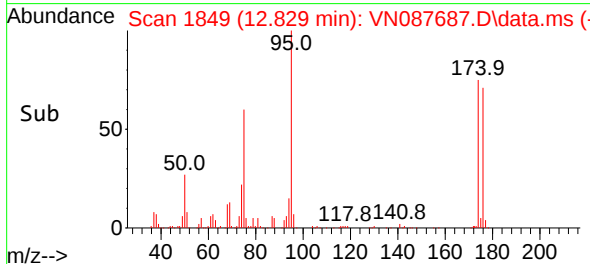
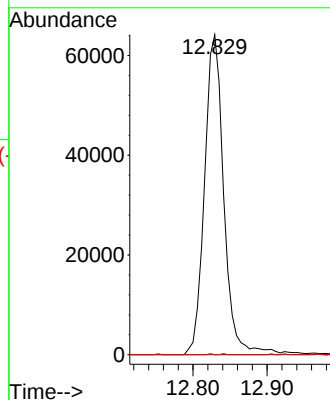
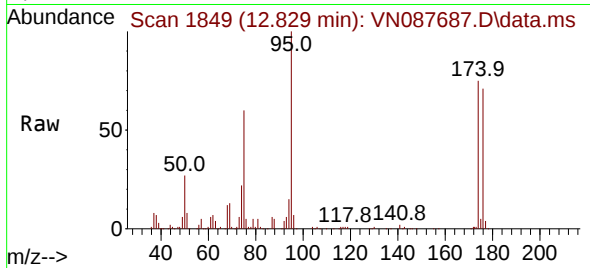




#81
trans-1,4-Dichloro-2-butene
Concen: 65.996 ug/l
RT: 12.829 min Scan# 11
Delta R.T. 0.112 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

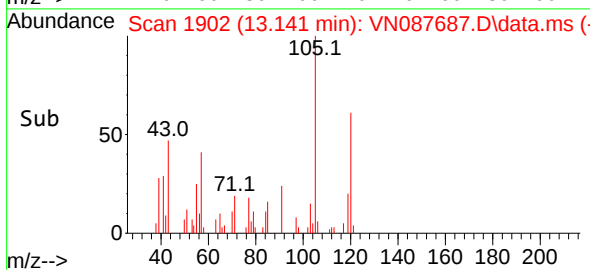
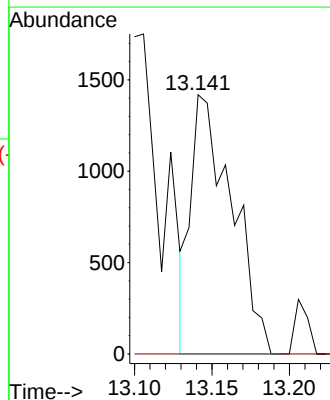
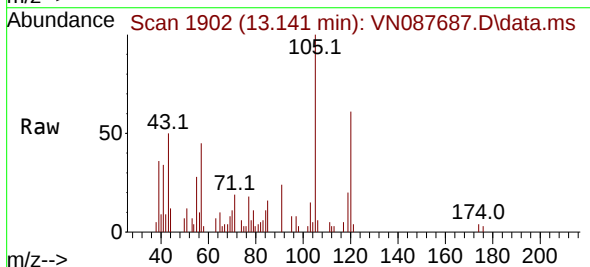
Instrument :
MSVOA_N
ClientSampleId :
33125

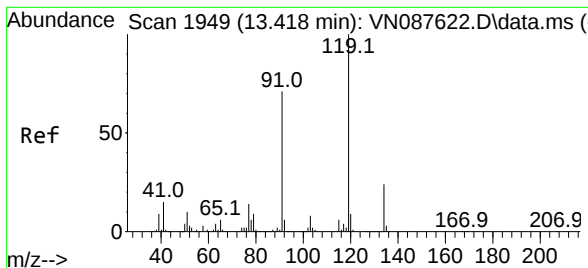
Tgt Ion: 75 Resp: 115788
Ion Ratio Lower Upper
75 100
53 0.1 101.8 152.6#
89 0.1 35.6 53.4#



#82
4-Chlorotoluene
Concen: 0.209 ug/l
RT: 13.141 min Scan# 1902
Delta R.T. -0.059 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Tgt Ion: 91 Resp: 2607
Ion Ratio Lower Upper
91 100
126 0.0 15.6 46.8#





#83

tert-Butylbenzene

Concen: 0.697 ug/l

RT: 13.459 min Scan# 1956

Delta R.T. 0.041 min

Lab File: VN087687.D

Acq: 28 Aug 2025 15:50

Instrument :

MSVOA_N

ClientSampleId :

33125

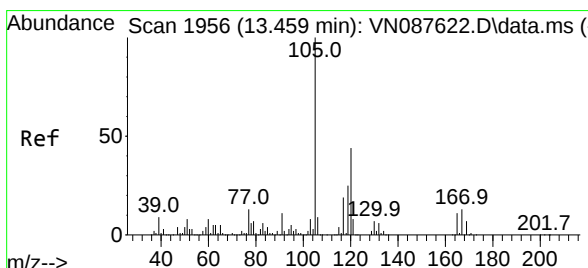
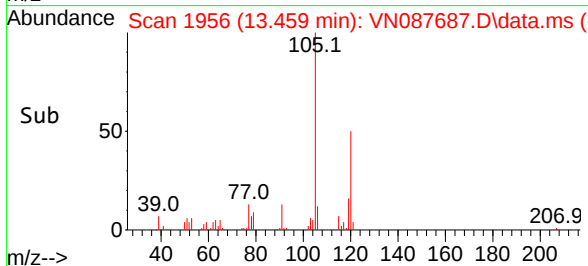
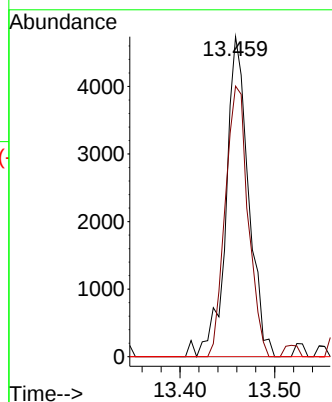
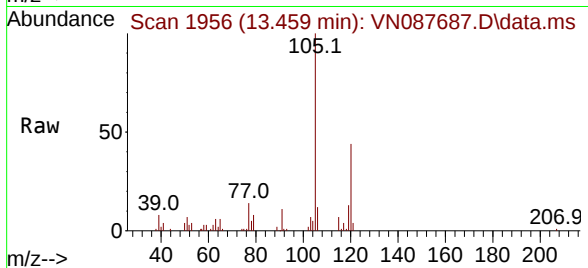
Tgt Ion:119 Resp: 7886

Ion Ratio Lower Upper

119 100

91 85.1 35.0 105.0

134 0.0 12.6 37.8#



#84

1,2,4-Trimethylbenzene

Concen: 4.642 ug/l

RT: 13.459 min Scan# 1956

Delta R.T. -0.000 min

Lab File: VN087687.D

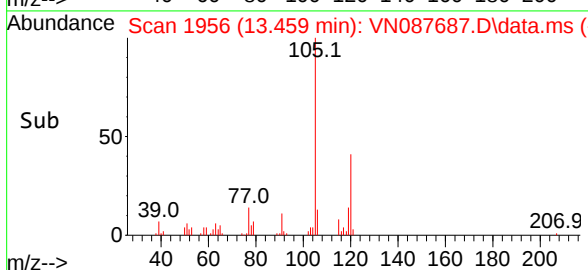
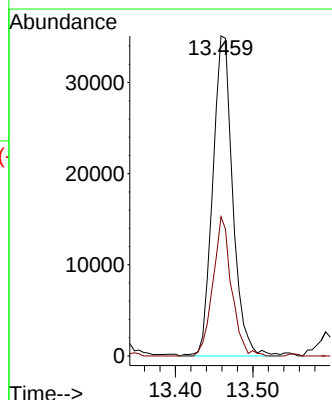
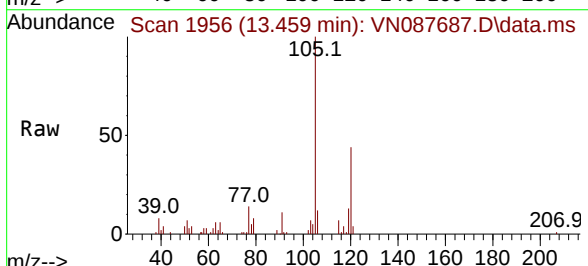
Acq: 28 Aug 2025 15:50

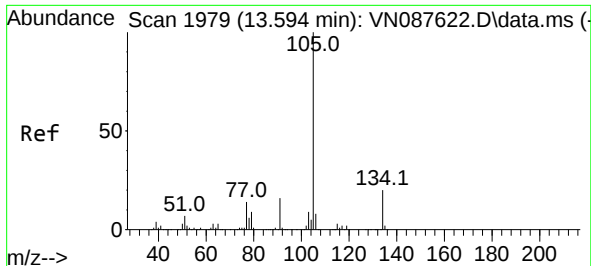
Tgt Ion:105 Resp: 63087

Ion Ratio Lower Upper

105 100

120 40.4 22.0 66.0

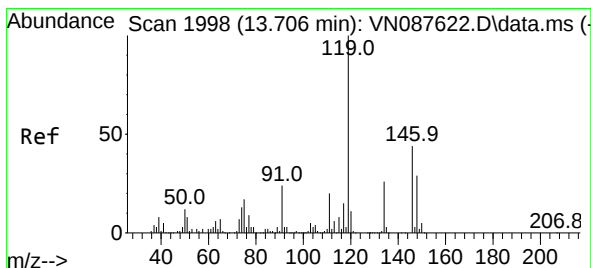
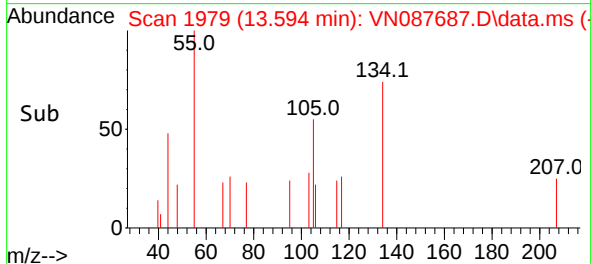
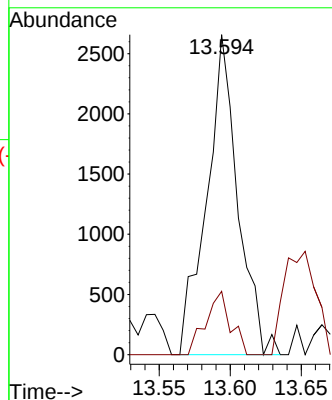
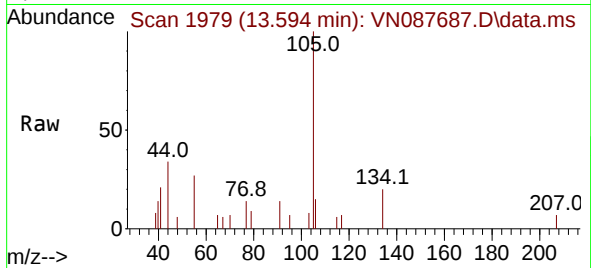




#85
 sec-Butylbenzene
 Concen: 0.242 ug/l
 RT: 13.594 min Scan# 1979
 Delta R.T. -0.000 min
 Lab File: VN087687.D
 Acq: 28 Aug 2025 15:50

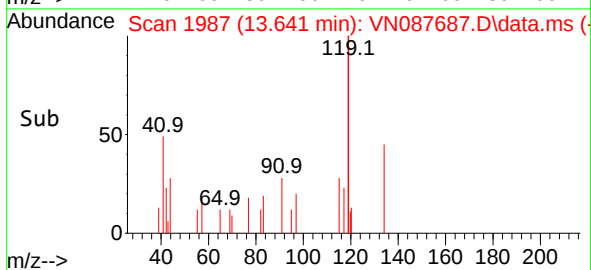
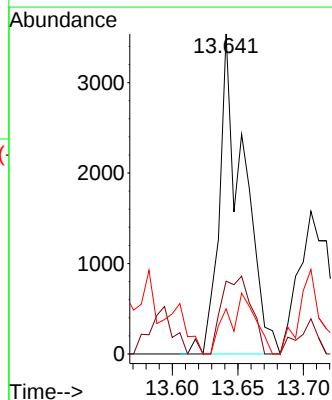
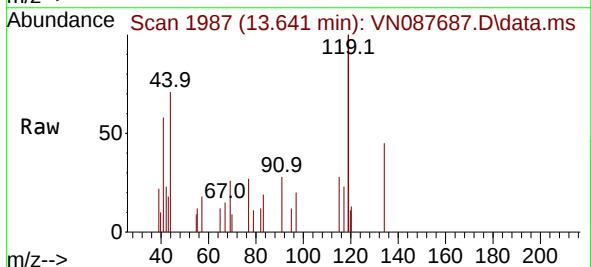
Instrument :
 MSVOA_N
 ClientSampleId :
 33125

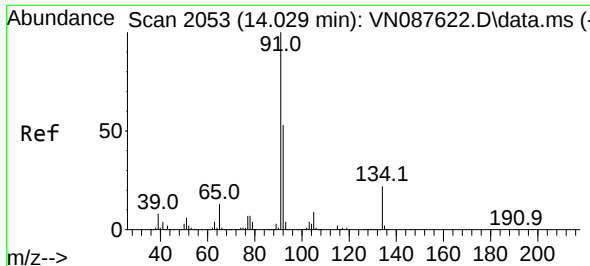
Tgt Ion:105 Resp: 4056
 Ion Ratio Lower Upper
 105 100
 134 15.7 9.6 28.6



#86
 p-Isopropyltoluene
 Concen: 0.331 ug/l
 RT: 13.641 min Scan# 1987
 Delta R.T. -0.065 min
 Lab File: VN087687.D
 Acq: 28 Aug 2025 15:50

Tgt Ion:119 Resp: 4585
 Ion Ratio Lower Upper
 119 100
 134 29.4 12.7 38.0
 91 21.7 12.5 37.5

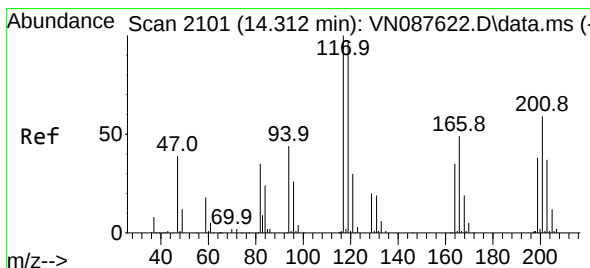
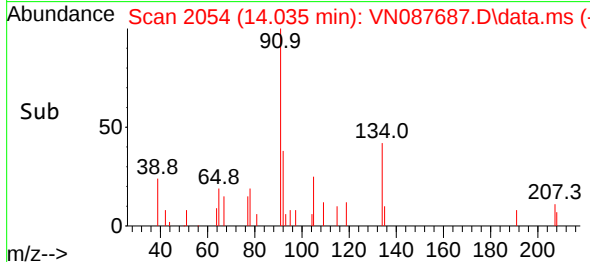
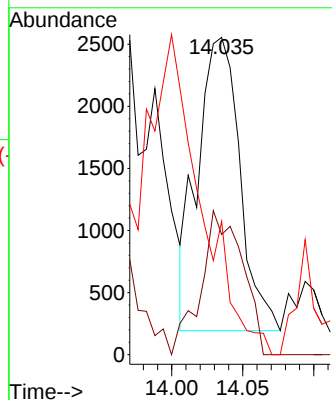
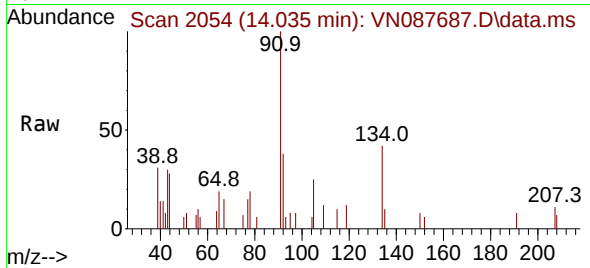




#89
n-Butylbenzene
Concen: 0.354 ug/l
RT: 14.035 min Scan# 2053
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

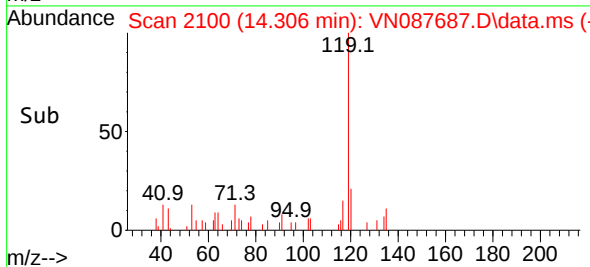
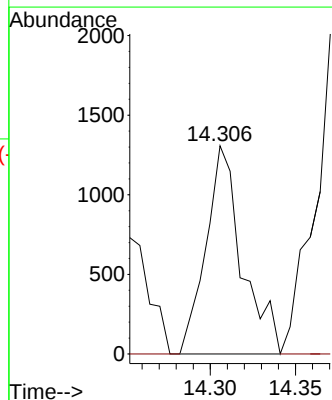
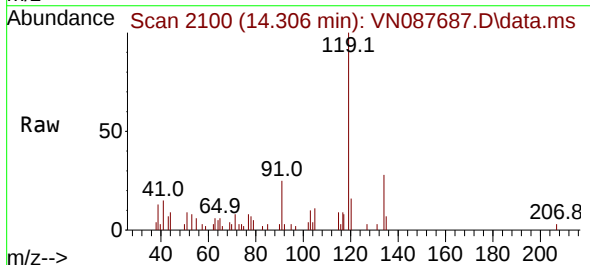
Instrument :
MSVOA_N
ClientSampleId :
33125

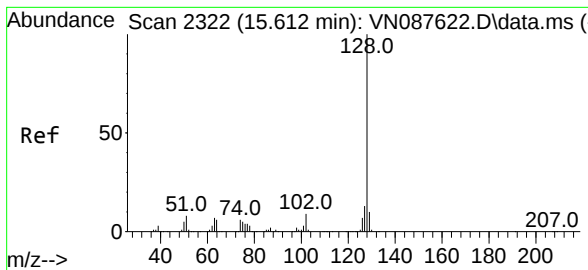
Tgt Ion: 91 Resp: 4874
Ion Ratio Lower Upper
91 100
92 48.2 25.9 77.8
134 0.0 11.7 35.0#



#90
Hexachloroethane
Concen: 0.729 ug/l
RT: 14.306 min Scan# 2100
Delta R.T. -0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

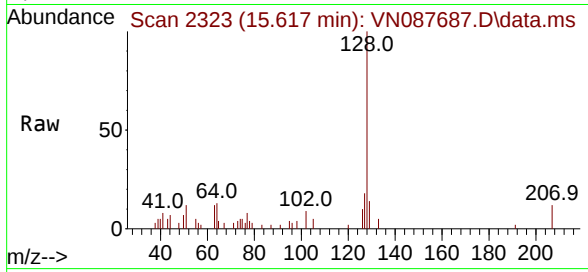
Tgt Ion: 117 Resp: 1925
Ion Ratio Lower Upper
117 100
201 0.0 29.1 87.4#





#95
Naphthalene
Concen: 0.926 ug/l
RT: 15.617 min Scan# 21
Delta R.T. 0.006 min
Lab File: VN087687.D
Acq: 28 Aug 2025 15:50

Instrument :
MSVOA_N
ClientSampleId :
33125



Tgt Ion:	128	Resp:	13884
Ion	Ratio	Lower	Upper
128	100		
127	19.3	10.6	15.8#
129	11.9	8.6	12.8

