

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
 Data File : VN087173.D
 Acq On : 25 Jun 2025 13:33
 Operator : JC\MD
 Sample : Q2349-04
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 002-35TH-AVE(JUNE)

Quant Time: Jun 25 15:31:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Jun 25 10:49:56 2025
 Response via : Initial Calibration

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

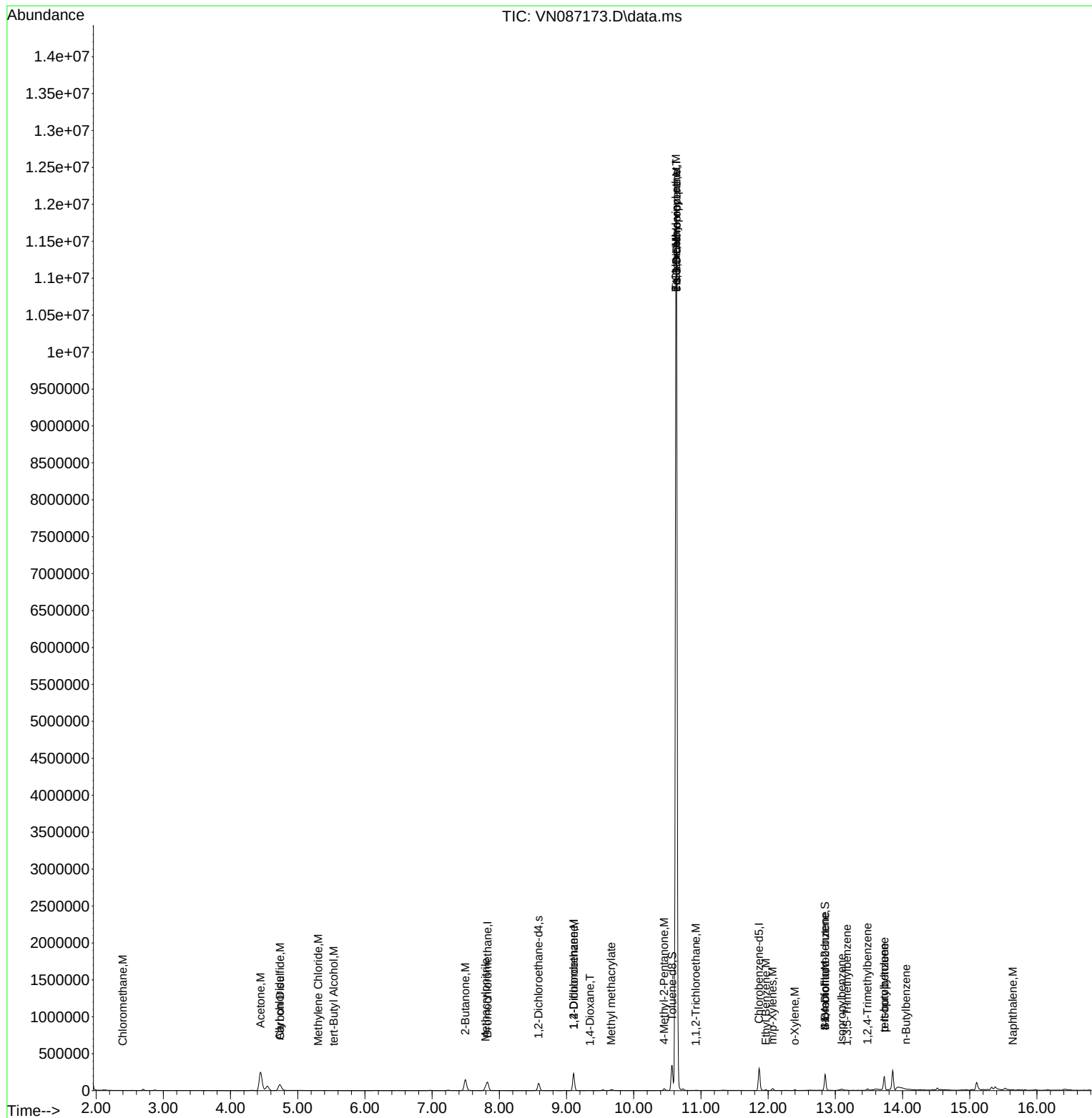
Internal Standards						
1) Bromochloromethane	7.824	128	37564	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	195128	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	182621	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.583	65	83160	29.382	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	97.933%		
60) 4-Bromofluorobenzene	12.847	95	80783	28.666	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	95.567%		
63) Toluene-d8	10.571	98	247262	30.155	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	100.533%		
Target Compounds						
					Qvalue	
3) Chloromethane	2.395	50	508	0.220	ug/l #	42
15) Acetone	4.448	58	169407	348.836	ug/l	89
16) Carbon Disulfide	4.736	76	10663	1.603	ug/l	95
17) Allyl chloride	4.730	41	14026	3.737	ug/l	86
18) Methylene Chloride	5.306	84	710	0.269	ug/l #	18
23) tert-Butyl Alcohol	5.536	59	670	1.070	ug/l #	100
30) 2-Butanone	7.494	43	245460	119.646	ug/l	100
35) Methacrylonitrile	7.794	41	8461	4.092	ug/l #	44
36) 1,2-Dichloroethane	9.106	62	6215	1.996	ug/l #	75
45) 1,4-Dioxane	9.347	88	253	6.198	ug/l #	13
46) Methyl methacrylate	9.665	41	2689	0.959	ug/l #	30
48) t-1,3-Dichloropropene	10.635	75	62444	16.876	ug/l #	1
49) cis-1,3-Dichloropropene	10.635	75	62444	15.874	ug/l #	1
50) 1,1,2-Trichloroethane	10.924	97	1281	0.548	ug/l #	15
55) 2-Chloroethyl vinyl ether	10.630	63	537765	263.881	ug/l #	1
56) Bromoform	12.847	173	432	0.256	ug/l #	1
58) 4-Methyl-2-Pentanone	10.453	43	22458	6.117	ug/l	95
62) Toluene	10.630	91	9499318	920.999	ug/l	97
66) Ethyl Benzene	11.965	91	9939	0.880	ug/l	96
67) m/p-Xylenes	12.065	106	9684	2.239	ug/l	90
68) o-Xylene	12.394	106	3297	0.799	ug/l	96
70) Isopropylbenzene	13.094	105	3990	0.388	ug/l	95
76) 1,3,5-Trimethylbenzene	13.171	105	2389	0.285	ug/l	99
77) t-1,4-Dichloro-2-butene	12.847	75	40196	28.402	ug/l #	13
79) tert-butylbenzene	13.729	119	104798	14.899	ug/l	59
80) 1,2,4-Trimethylbenzene	13.476	105	7682	0.914	ug/l	95
82) p-Isopropyltoluene	13.729	119	104798	12.315	ug/l	99
85) n-Butylbenzene	14.053	91	1666	0.215	ug/l	93
91) Naphthalene	15.641	128	7082	0.703	ug/l	97

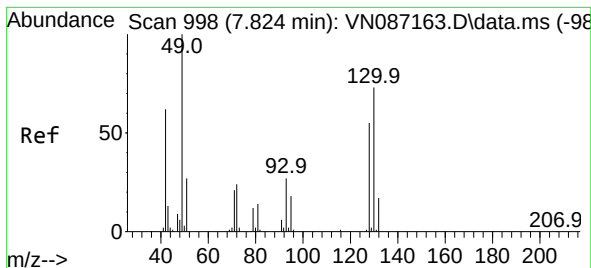
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
Data File : VN087173.D
Acq On : 25 Jun 2025 13:33
Operator : JC\MD
Sample : Q2349-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

Quant Time: Jun 25 15:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

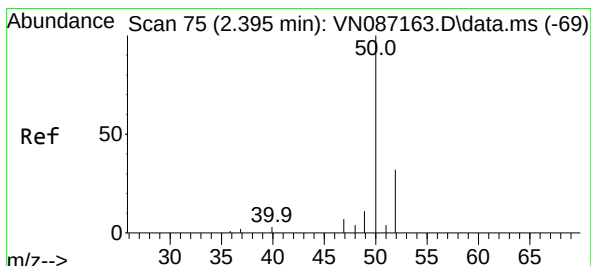
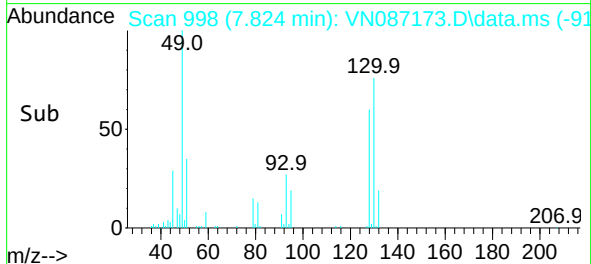
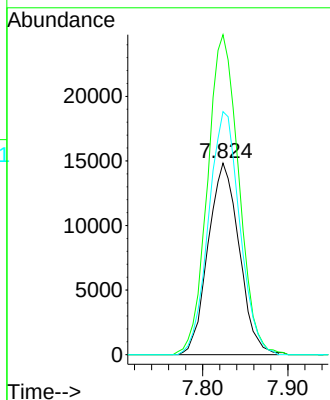
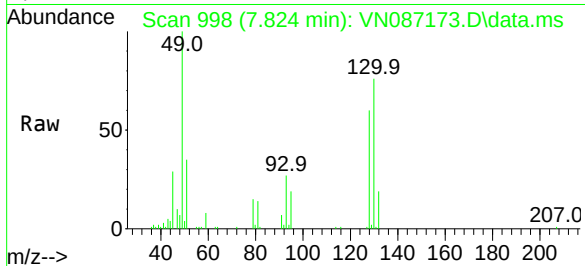




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

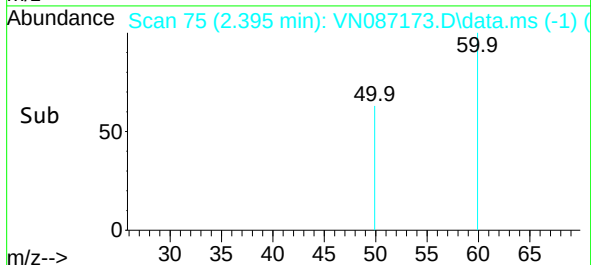
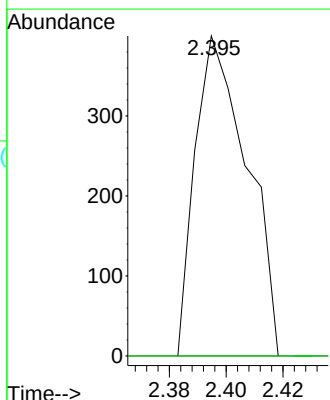
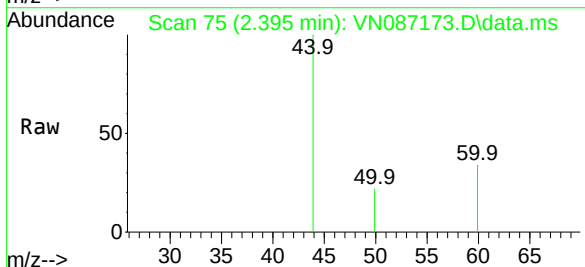
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

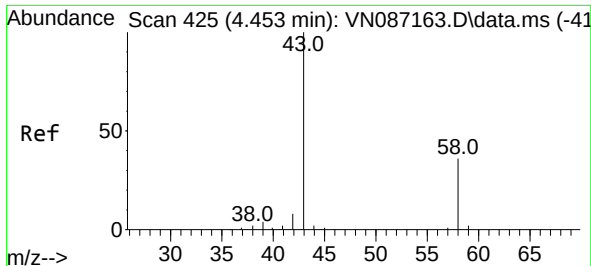
Tgt Ion:128 Resp: 37564
Ion Ratio Lower Upper
128 100
49 167.9 0.0 450.5
130 127.6 0.0 320.7



#3
Chloromethane
Concen: 0.220 ug/l
RT: 2.395 min Scan# 75
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 50 Resp: 508
Ion Ratio Lower Upper
50 100
52 0.0 25.9 38.9#





#15

Acetone

Concen: 348.836 ug/l

RT: 4.448 min Scan# 41

Delta R.T. -0.006 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

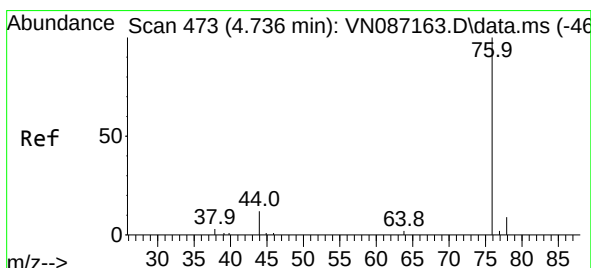
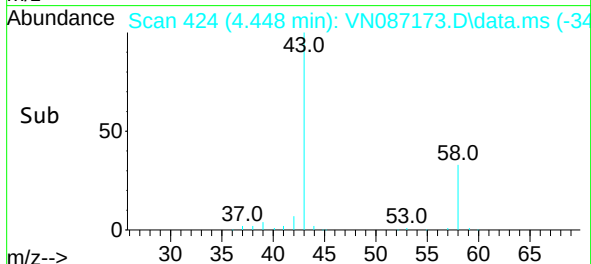
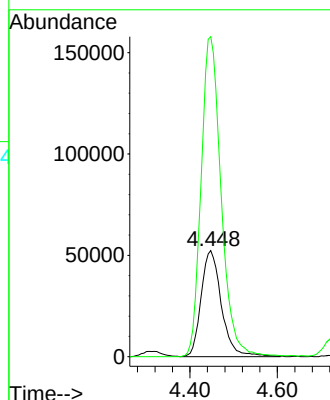
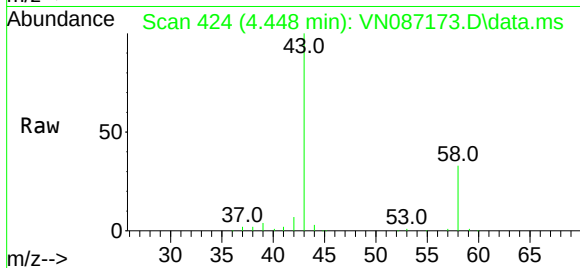
002-35TH-AVE(JUNE)

Tgt Ion: 58 Resp: 169407

Ion Ratio Lower Upper

58 100

43 301.5 224.3 336.5



#16

Carbon Disulfide

Concen: 1.603 ug/l

RT: 4.736 min Scan# 473

Delta R.T. 0.000 min

Lab File: VN087173.D

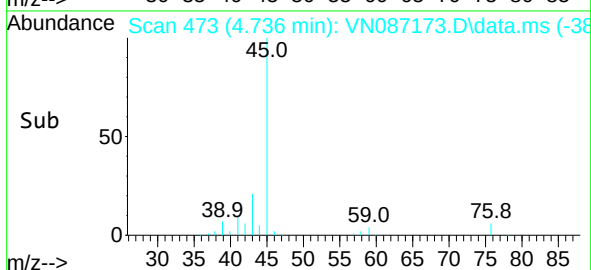
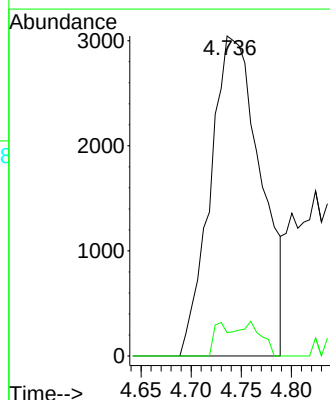
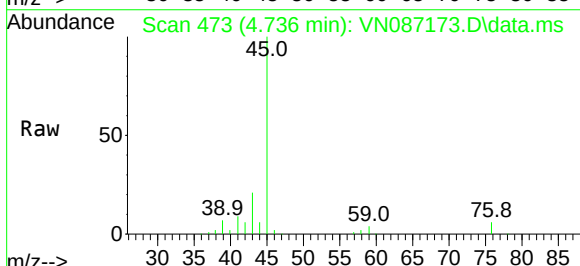
Acq: 25 Jun 2025 13:33

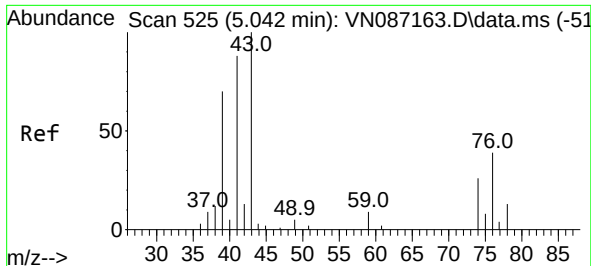
Tgt Ion: 76 Resp: 10663

Ion Ratio Lower Upper

76 100

78 7.3 7.2 10.8





#17

Allyl chloride

Concen: 3.737 ug/l

RT: 4.730 min Scan# 41

Delta R.T. -0.312 min

Lab File: VN087173.D

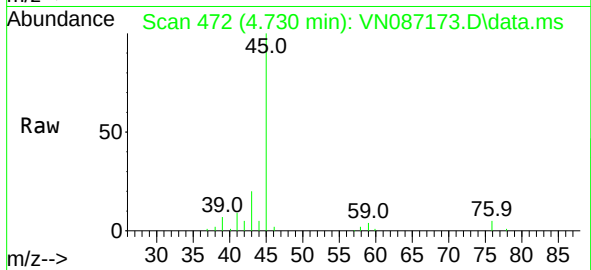
Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

002-35TH-AVE(JUNE)



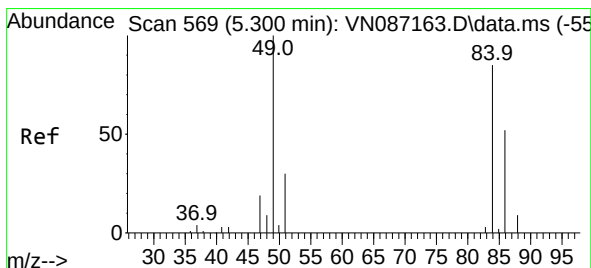
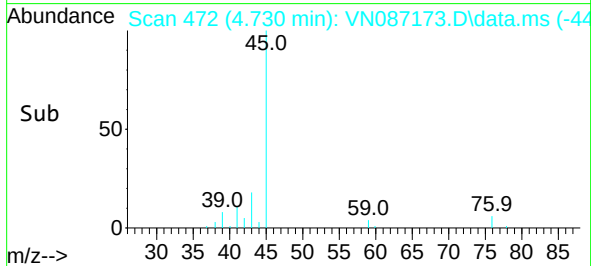
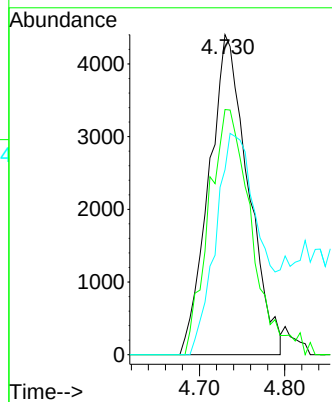
Tgt Ion: 41 Resp: 14026

Ion Ratio Lower Upper

41 100

39 76.6 36.0 108.0

76 57.8 19.5 58.5



#18

Methylene Chloride

Concen: 0.269 ug/l

RT: 5.306 min Scan# 570

Delta R.T. 0.006 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Tgt Ion: 84 Resp: 710

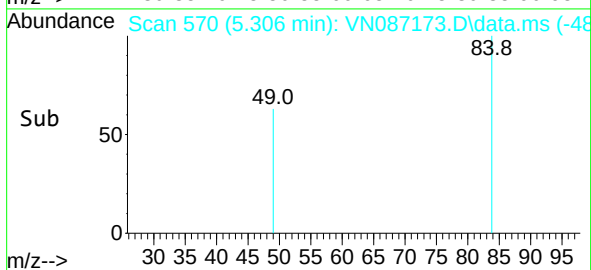
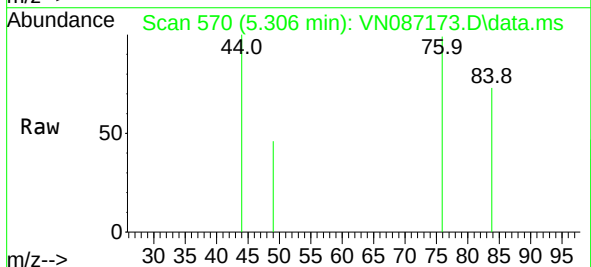
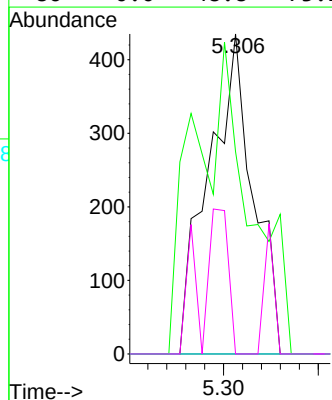
Ion Ratio Lower Upper

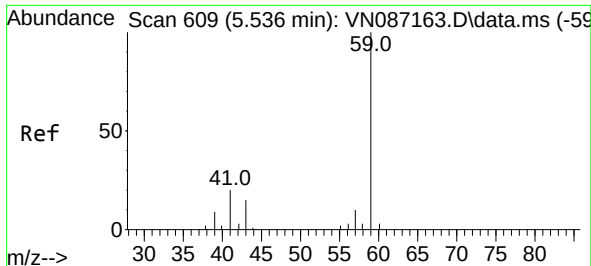
84 100

49 19.5 94.0 141.0#

51 0.0 28.3 42.5#

86 0.0 48.8 73.2#

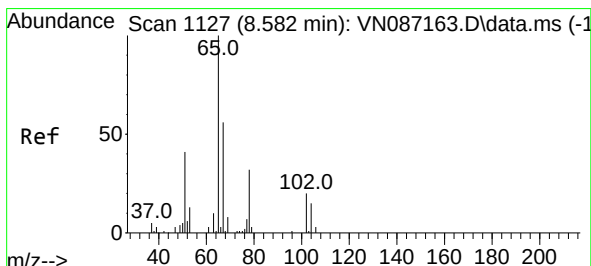
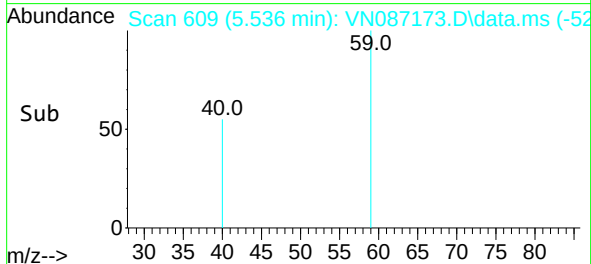
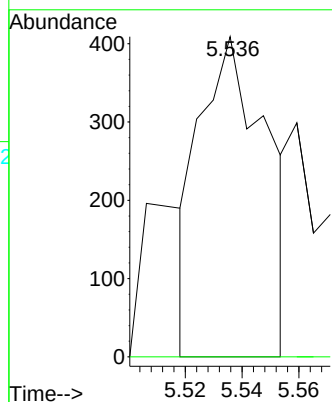
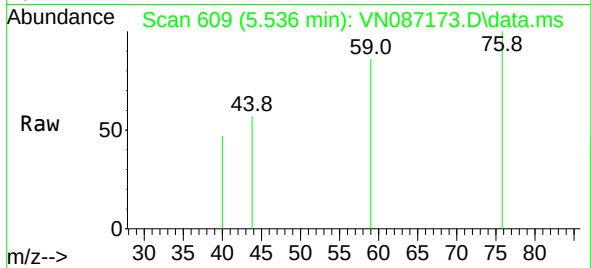




#23
tert-Butyl Alcohol
Concen: 1.070 ug/l
RT: 5.536 min Scan# 609
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

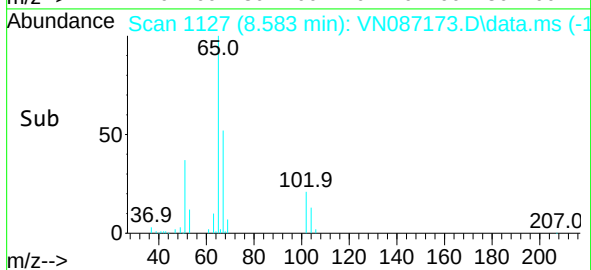
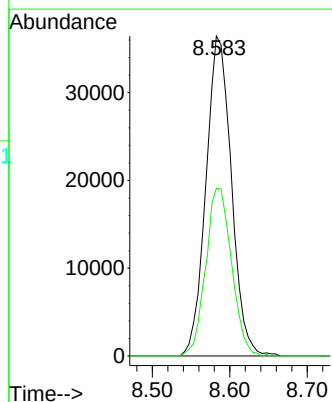
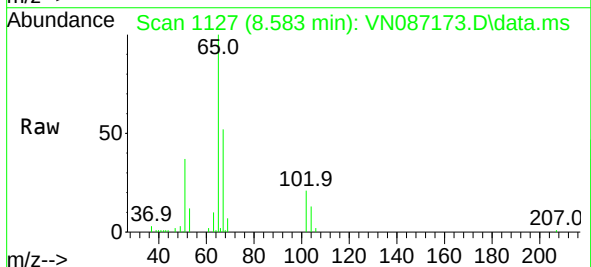
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

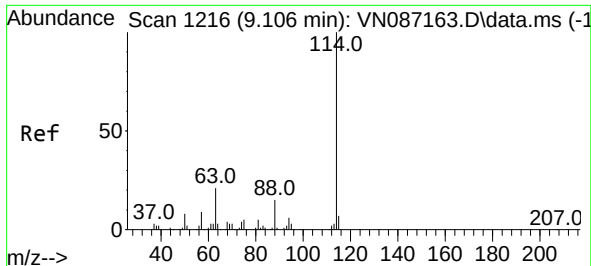
Tgt Ion: 59 Resp: 670
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0



#27
1,2-Dichloroethane-d4
Concen: 29.382 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 65 Resp: 83160
Ion Ratio Lower Upper
65 100
67 53.3 41.9 62.9





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.106 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

002-35TH-AVE(JUNE)

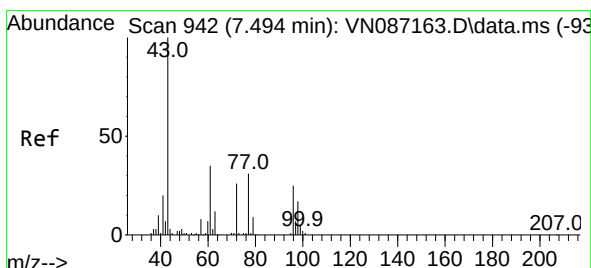
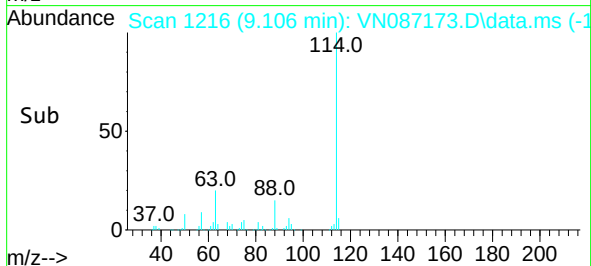
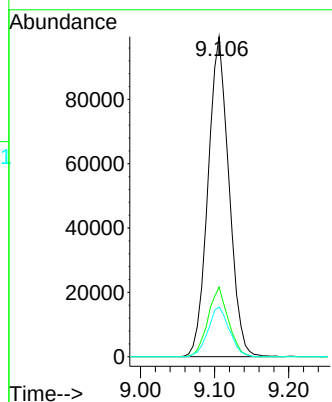
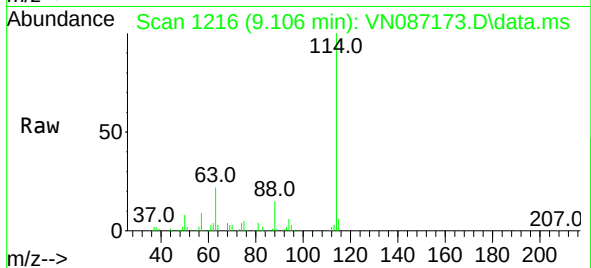
Tgt Ion:114 Resp: 195128

Ion Ratio Lower Upper

114 100

63 21.1 17.0 25.4

88 15.8 12.6 19.0



#30

2-Butanone

Concen: 119.646 ug/l

RT: 7.494 min Scan# 942

Delta R.T. 0.000 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

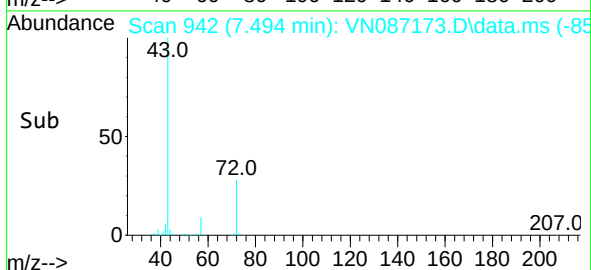
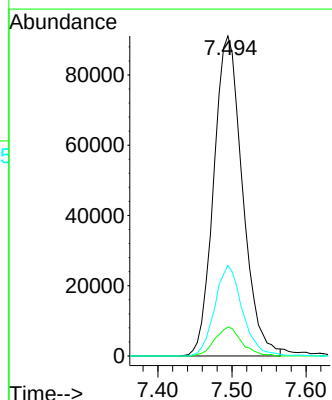
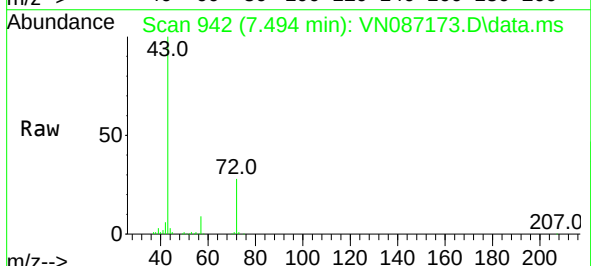
Tgt Ion: 43 Resp: 245460

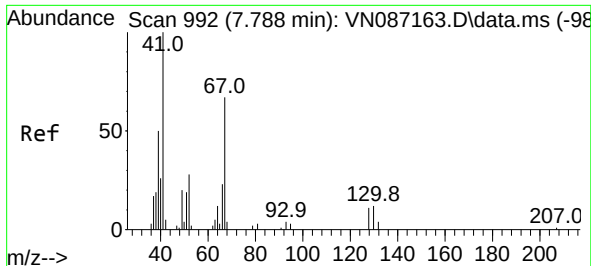
Ion Ratio Lower Upper

43 100

57 8.4 6.3 9.5

72 27.1 21.8 32.6

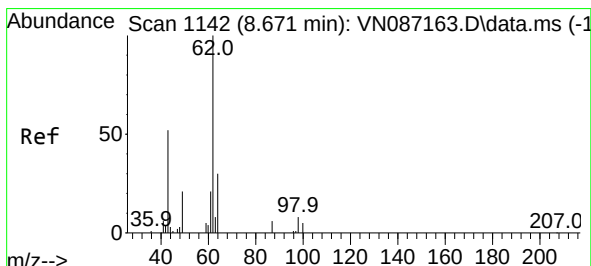
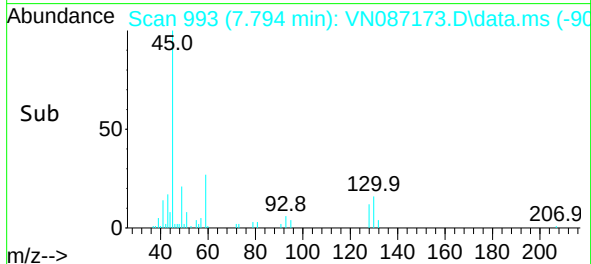
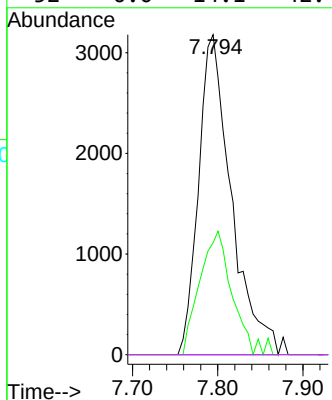
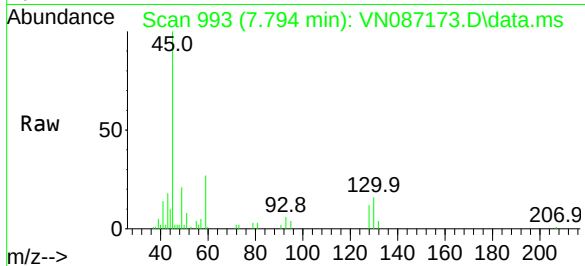




#35
Methacrylonitrile
Concen: 4.092 ug/l
RT: 7.794 min Scan# 992
Delta R.T. 0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

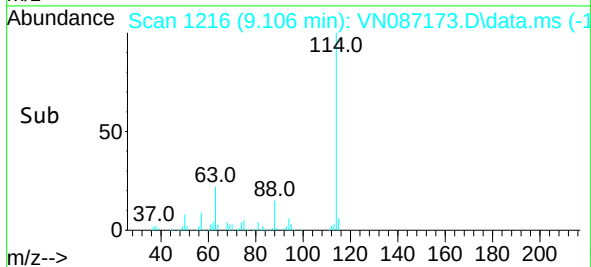
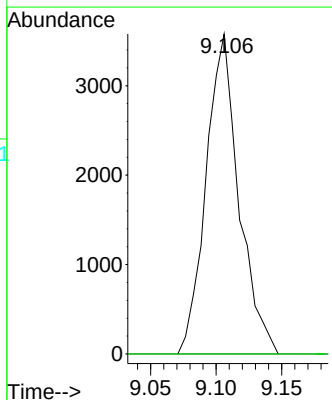
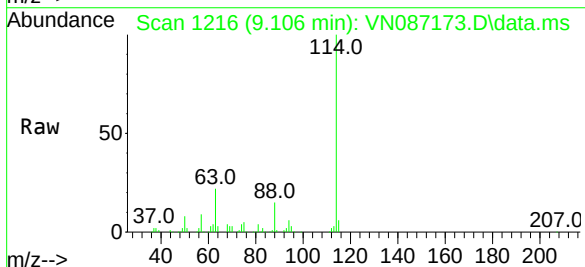
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

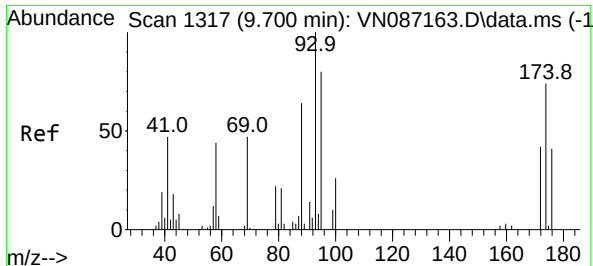
Tgt Ion: 41	Resp:	8461
Ion Ratio	Lower	Upper
41	100	
39	34.9	24.4 73.2
67	0.0	33.3 99.8#
52	0.0	14.1 42.4#



#36
1,2-Dichloroethane
Concen: 1.996 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.435 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 62	Resp:	6215
Ion Ratio	Lower	Upper
62	100	
98	0.0	7.2 10.8#





#45

1,4-Dioxane

Concen: 6.198 ug/l

RT: 9.347 min Scan# 1311

Delta R.T. -0.353 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

002-35TH-AVE(JUNE)

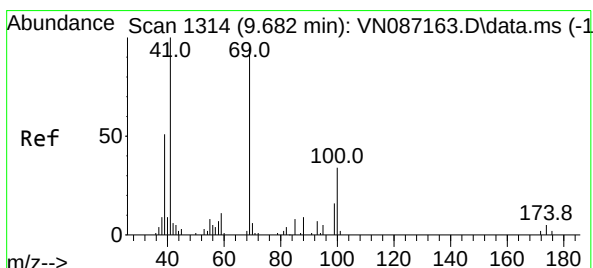
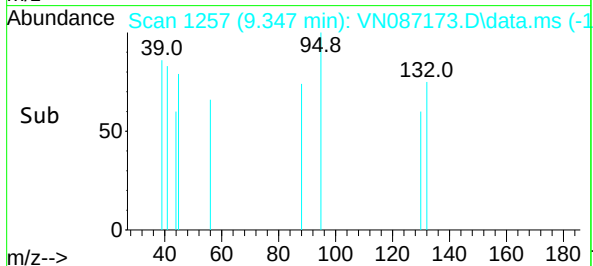
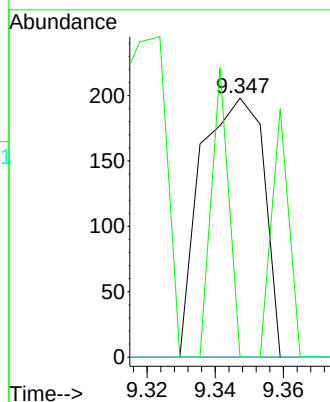
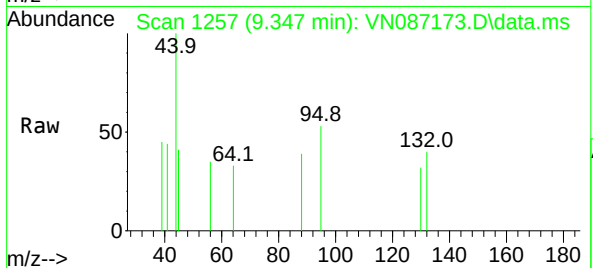
Tgt Ion: 88 Resp: 253

Ion Ratio Lower Upper

88 100

43 68.0 21.3 31.9#

58 0.0 61.7 92.5#



#46

Methyl methacrylate

Concen: 0.959 ug/l

RT: 9.665 min Scan# 1311

Delta R.T. -0.018 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

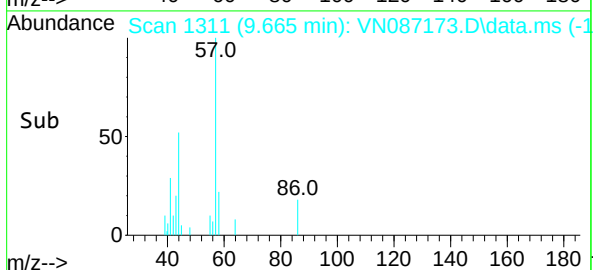
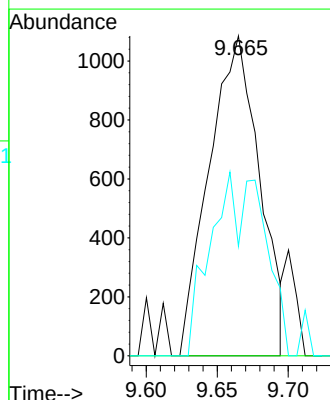
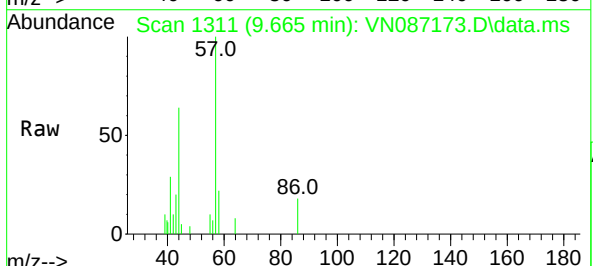
Tgt Ion: 41 Resp: 2689

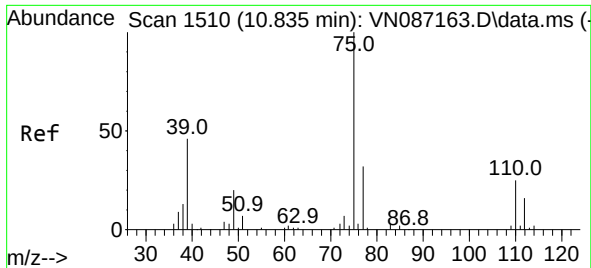
Ion Ratio Lower Upper

41 100

69 0.0 45.6 136.9#

39 34.3 26.2 78.5

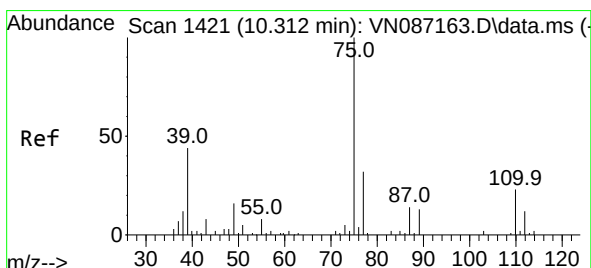
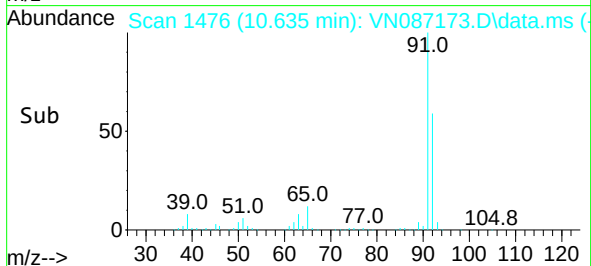
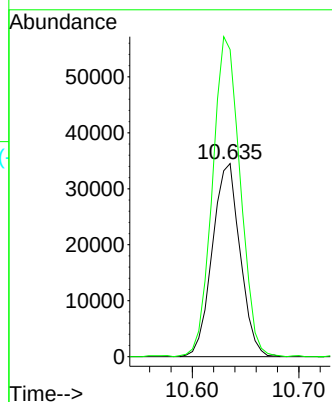
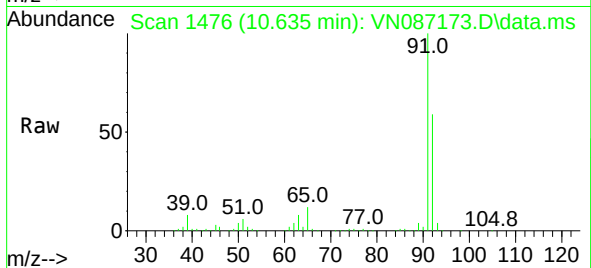




#48
t-1,3-Dichloropropene
Concen: 16.876 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.200 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

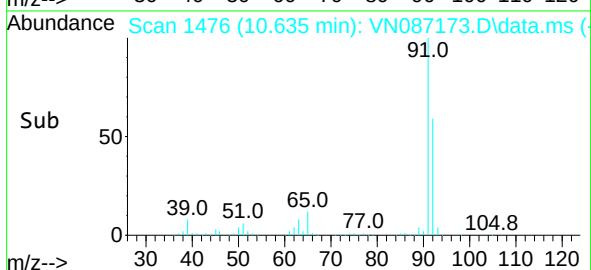
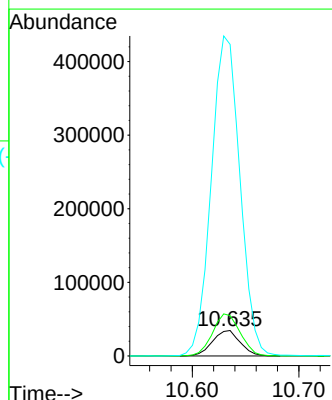
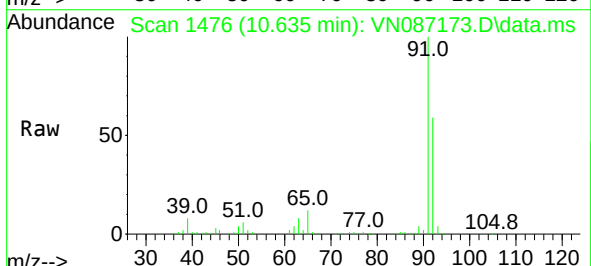
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

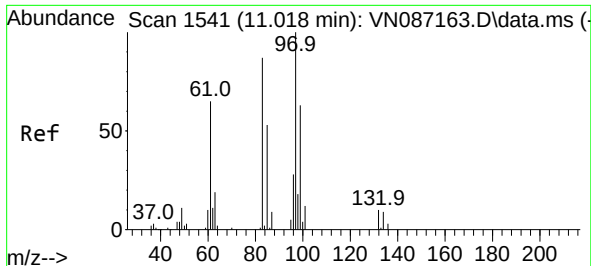
Tgt Ion: 75 Resp: 62444
Ion Ratio Lower Upper
75 100
77 158.4 25.4 38.0#



#49
cis-1,3-Dichloropropene
Concen: 15.874 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. 0.324 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 75 Resp: 62444
Ion Ratio Lower Upper
75 100
77 158.4 25.4 38.2#
39 1224.6 35.3 52.9#

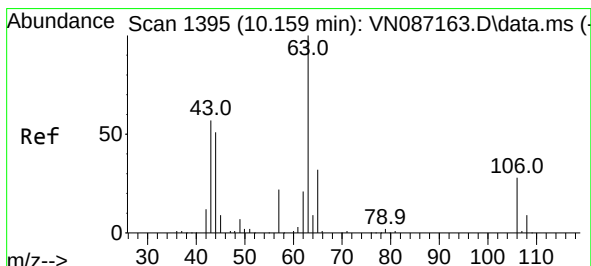
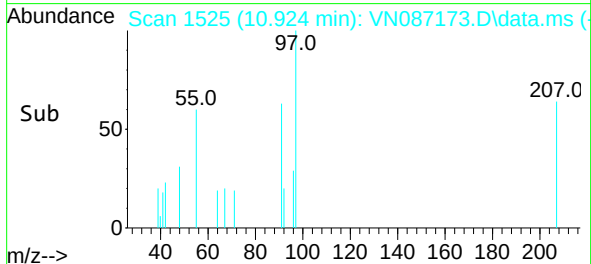
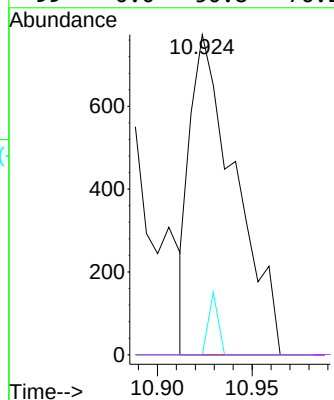
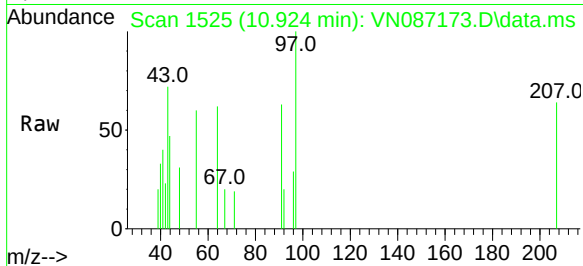




#50
1,1,2-Trichloroethane
Concen: 0.548 ug/l
RT: 10.924 min Scan# 11
Delta R.T. -0.094 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

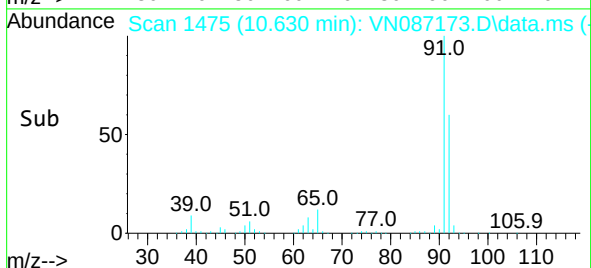
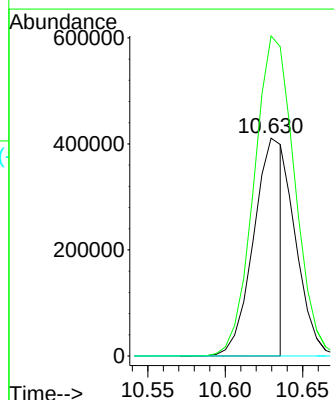
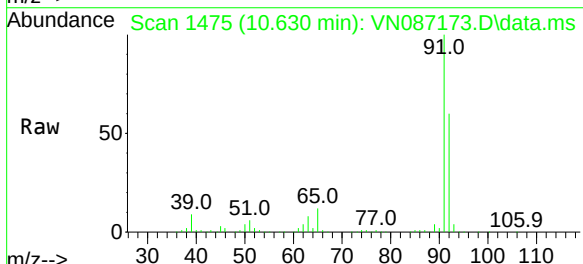
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

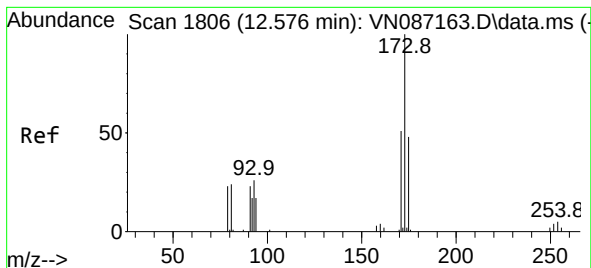
Tgt Ion: 97 Resp: 1281
Ion Ratio Lower Upper
97 100
83 0.0 69.6 104.4#
85 0.0 42.0 63.0#
99 0.0 50.8 76.2#



#55
2-Chloroethyl vinyl ether
Concen: 263.881 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.471 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 63 Resp: 537765
Ion Ratio Lower Upper
63 100
65 145.1 25.6 38.4#
106 0.0 21.9 32.9#





#56

Bromoform

Concen: 0.256 ug/l

RT: 12.847 min Scan# 1806

Delta R.T. 0.271 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

002-35TH-AVE(JUNE)

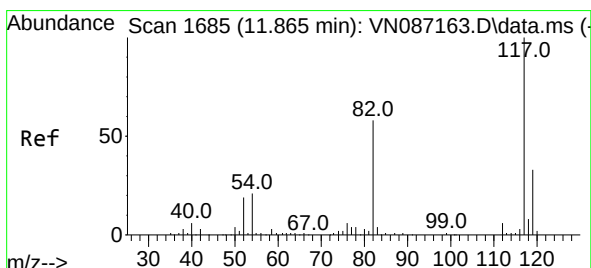
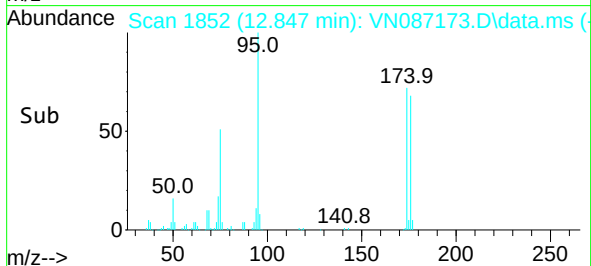
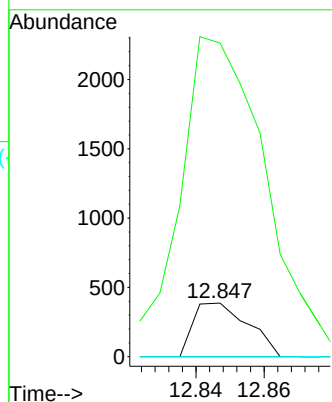
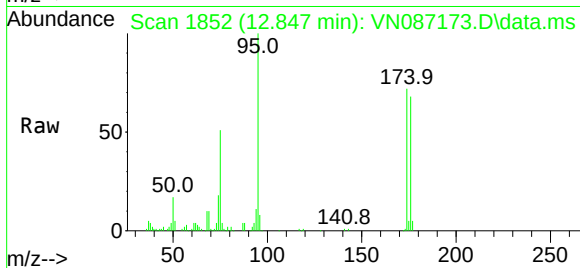
Tgt Ion:173 Resp: 432

Ion Ratio Lower Upper

173 100

175 929.9 38.7 58.1#

254 0.0 4.2 6.4#



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. 0.000 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

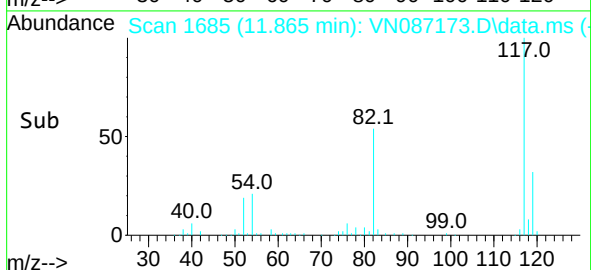
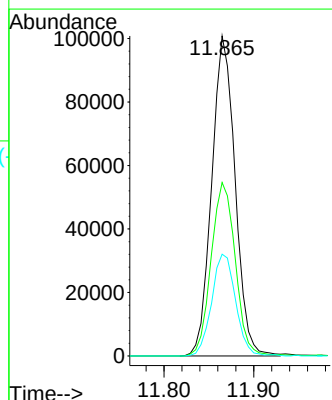
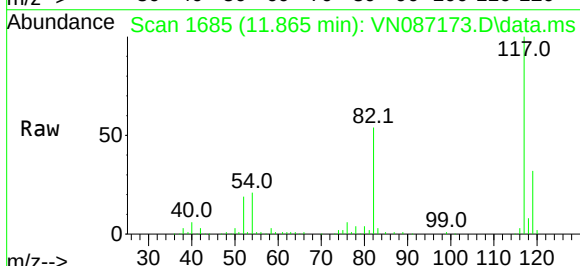
Tgt Ion:117 Resp: 182621

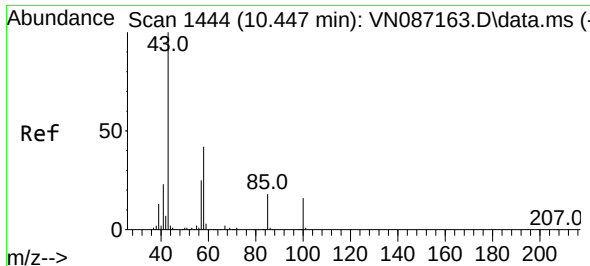
Ion Ratio Lower Upper

117 100

82 56.1 45.4 68.2

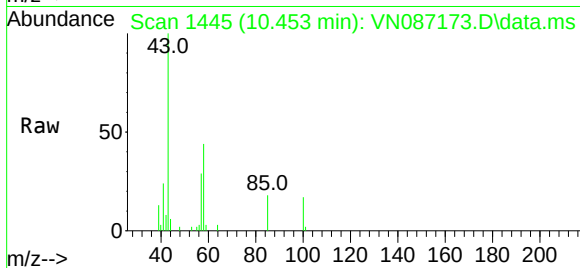
119 32.4 26.2 39.4



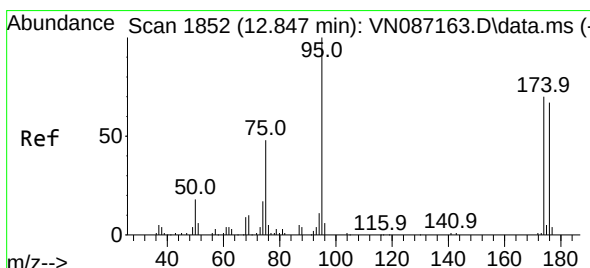
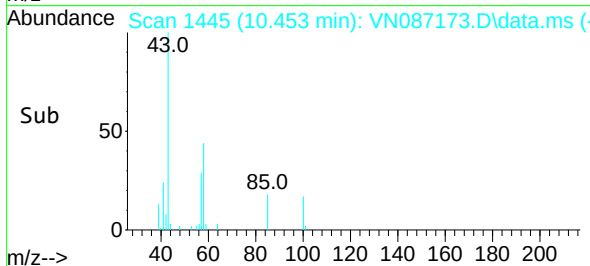
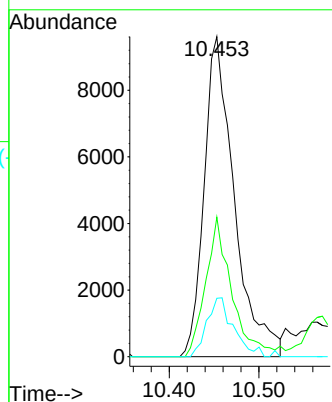


#58
4-Methyl-2-Pentanone
Concen: 6.117 ug/l
RT: 10.453 min Scan# 1445
Delta R.T. 0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

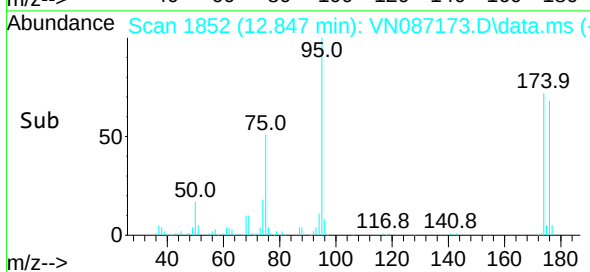
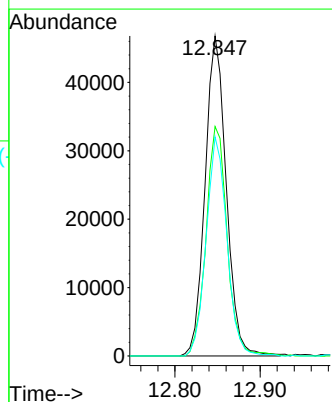
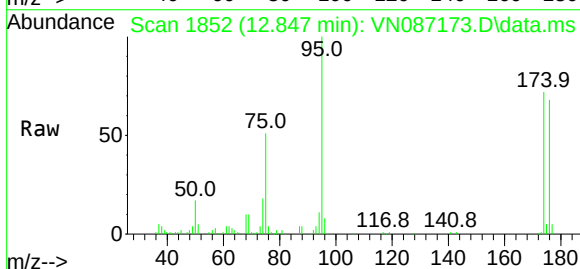


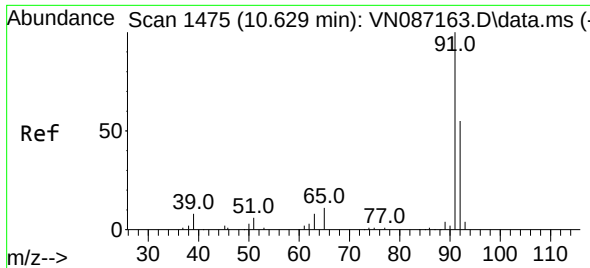
Tgt Ion:	43	Resp:	22458
Ion	Ratio	Lower	Upper
43	100		
58	37.7	32.6	49.0
85	15.7	14.6	22.0



#60
4-Bromofluorobenzene
Concen: 28.666 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion:	95	Resp:	80783
Ion	Ratio	Lower	Upper
95	100		
174	70.7	54.5	81.7
176	66.9	51.9	77.9

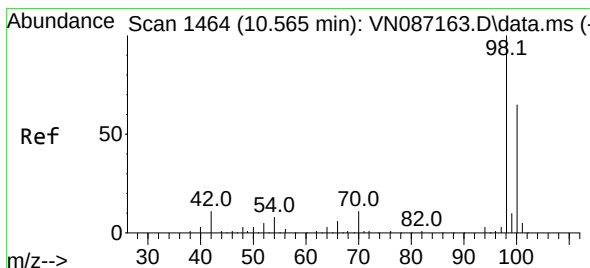
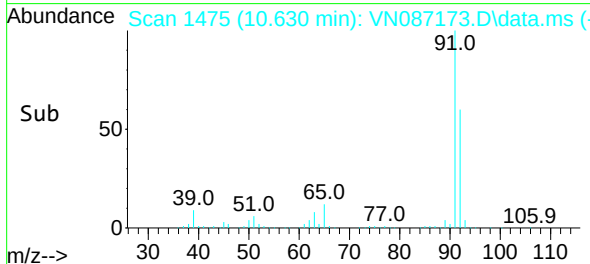
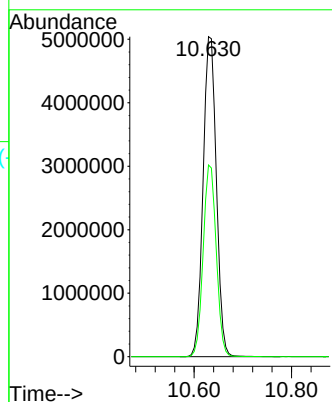
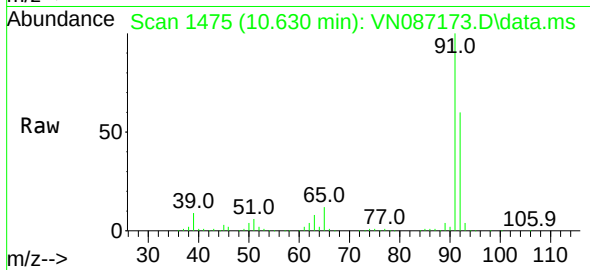




#62
Toluene
Concen: 920.999 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

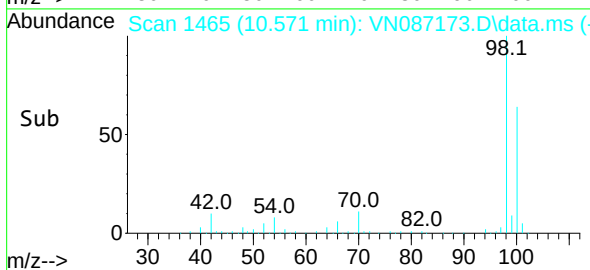
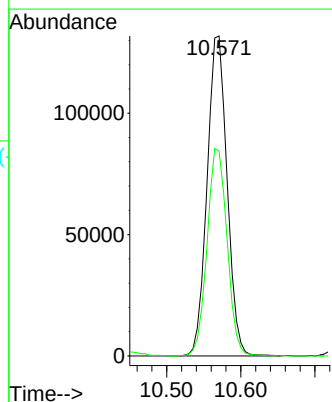
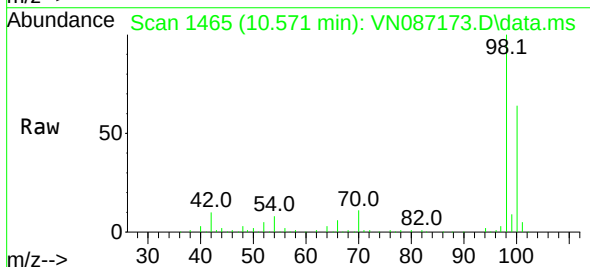
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

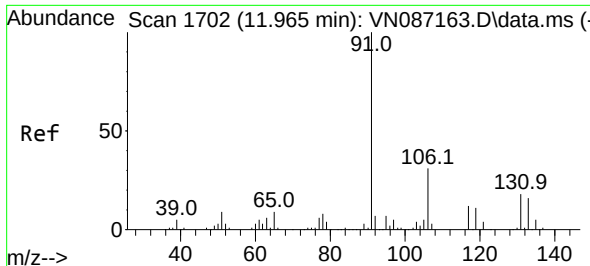
Tgt Ion: 91 Resp: 9499318
Ion Ratio Lower Upper
91 100
92 59.2 45.8 68.8



#63
Toluene-d8
Concen: 30.155 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. 0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 98 Resp: 247262
Ion Ratio Lower Upper
98 100
100 64.9 52.5 78.7

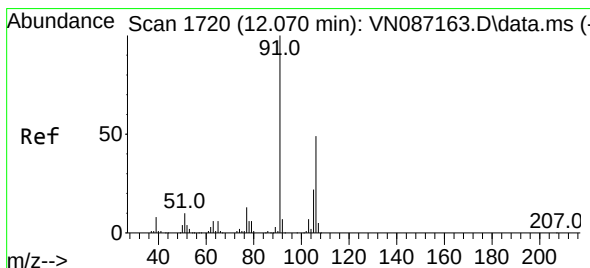
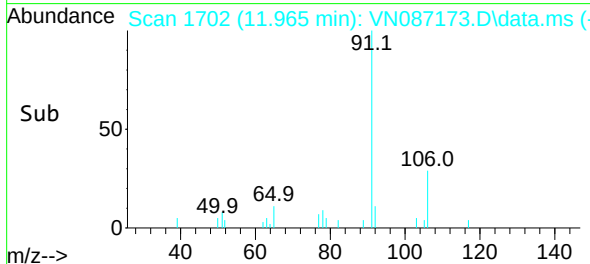
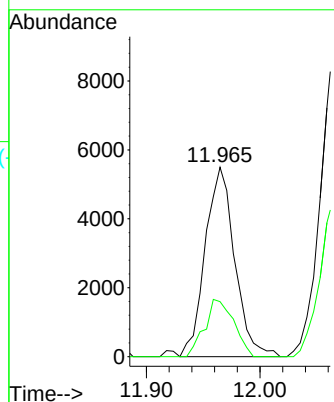
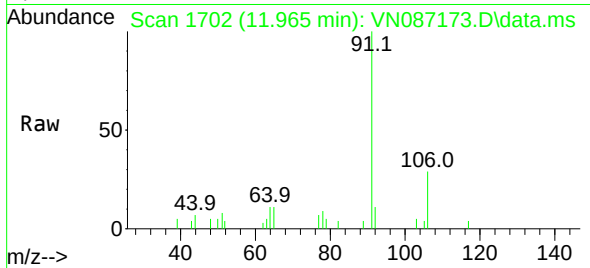




#66
Ethyl Benzene
Concen: 0.880 ug/l
RT: 11.965 min Scan# 1719
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

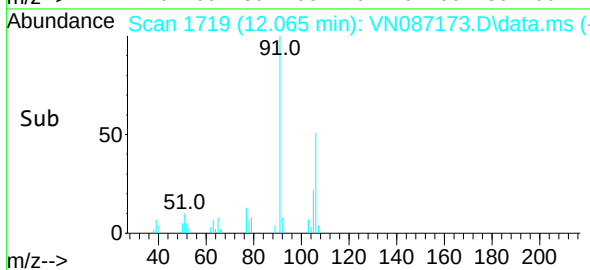
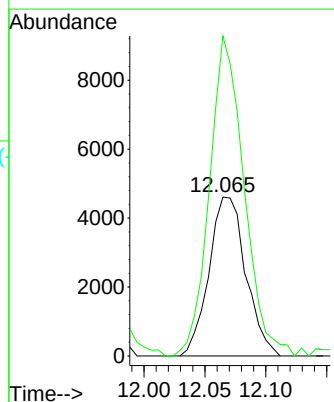
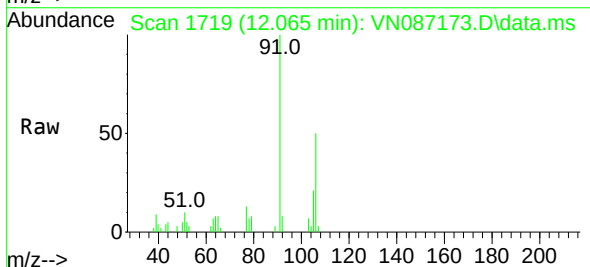
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

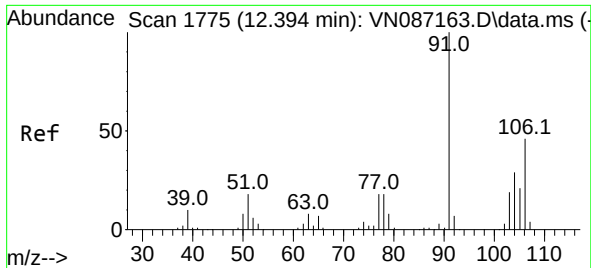
Tgt Ion: 91 Resp: 9939
Ion Ratio Lower Upper
91 100
106 29.1 24.8 37.2



#67
m/p-Xylenes
Concen: 2.239 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. -0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion:106 Resp: 9684
Ion Ratio Lower Upper
106 100
91 189.0 163.0 244.4

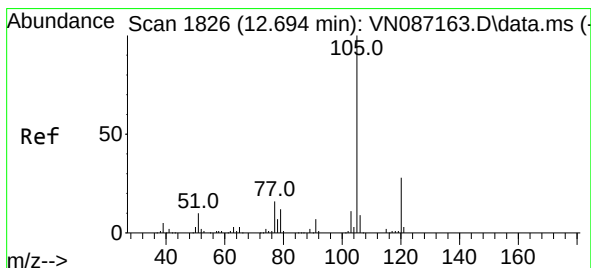
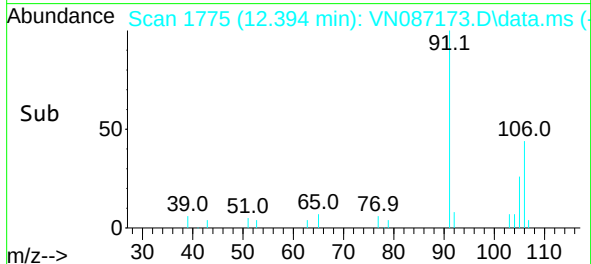
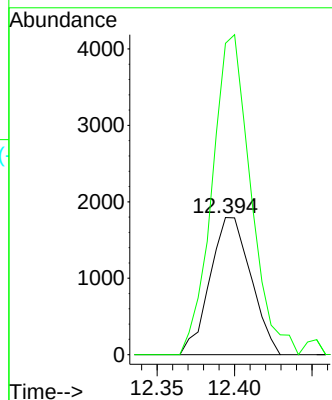
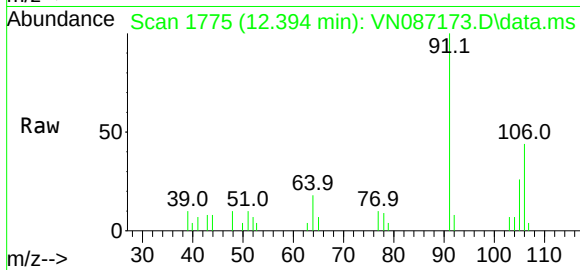




#68
o-Xylene
Concen: 0.799 ug/l
RT: 12.394 min Scan# 1775
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

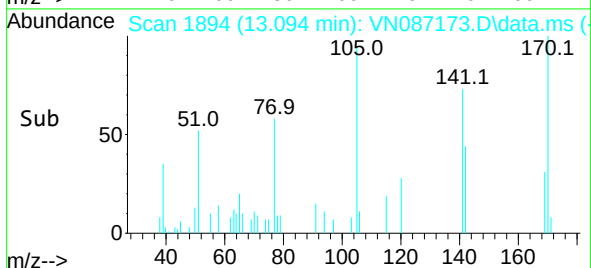
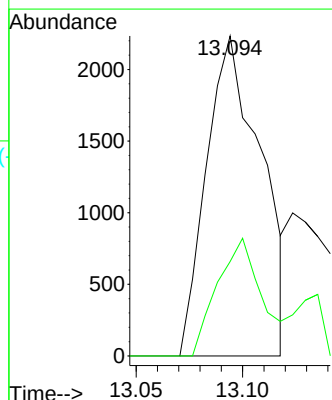
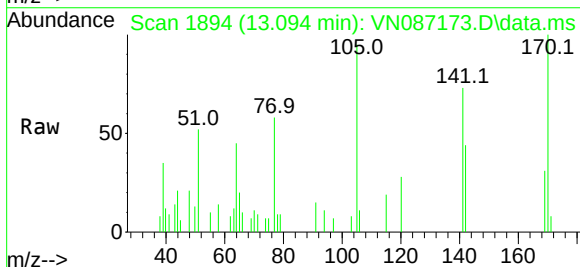
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

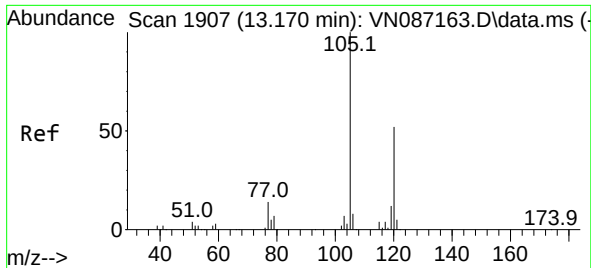
Tgt Ion:106 Resp: 3297
Ion Ratio Lower Upper
106 100
91 219.7 107.1 321.1



#70
Isopropylbenzene
Concen: 0.388 ug/l
RT: 13.094 min Scan# 1894
Delta R.T. 0.400 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion:105 Resp: 3990
Ion Ratio Lower Upper
105 100
120 29.7 19.0 35.2

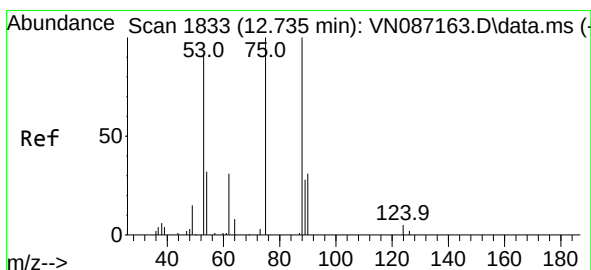
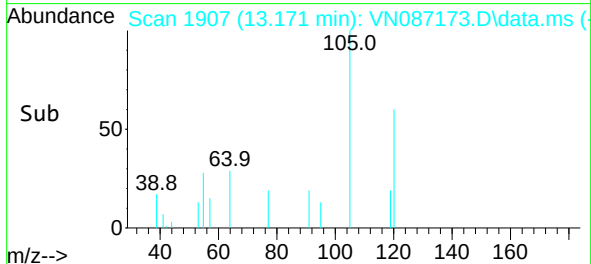
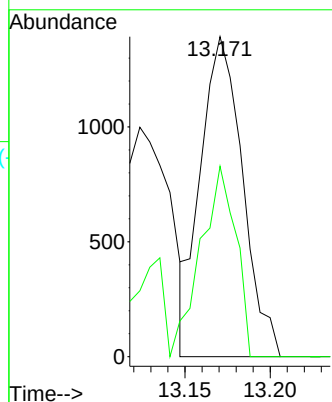
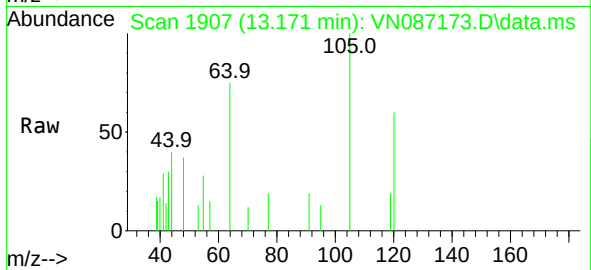




#76
1,3,5-Trimethylbenzene
Concen: 0.285 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

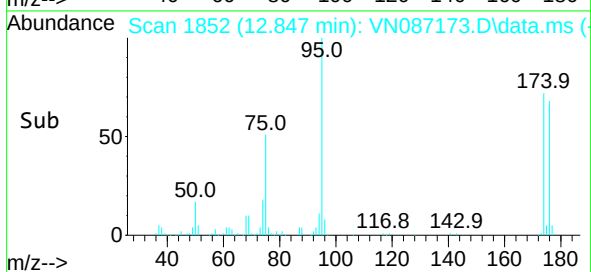
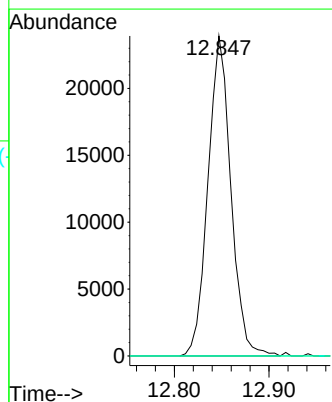
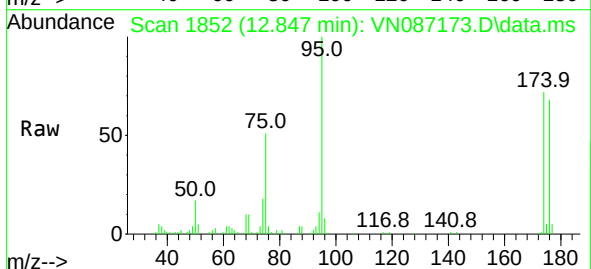
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

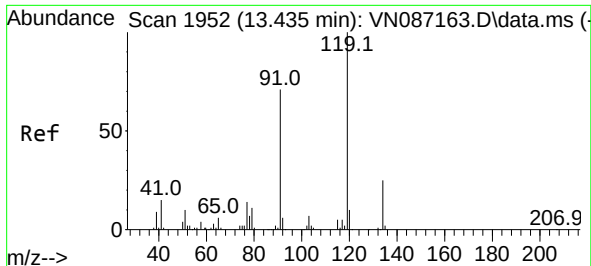
Tgt Ion:105 Resp: 2389
Ion Ratio Lower Upper
105 100
120 49.7 0.0 100.8



#77
t-1,4-Dichloro-2-butene
Concen: 28.402 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.112 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion: 75 Resp: 40196
Ion Ratio Lower Upper
75 100
53 0.0 45.9 137.6#
89 0.0 22.3 66.9#

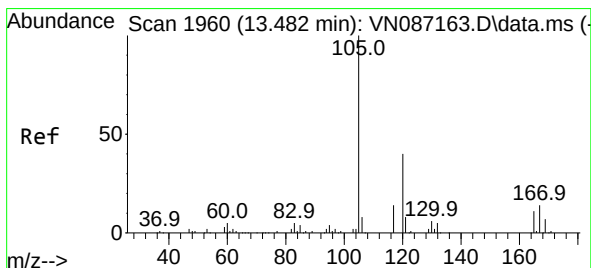
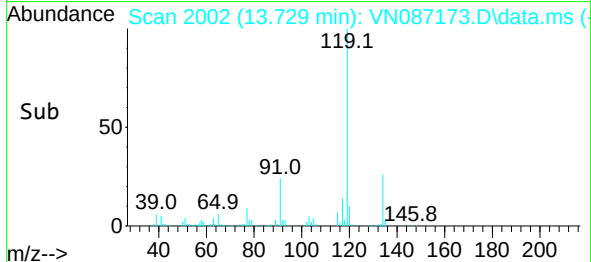
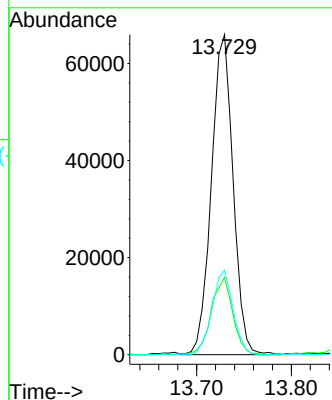
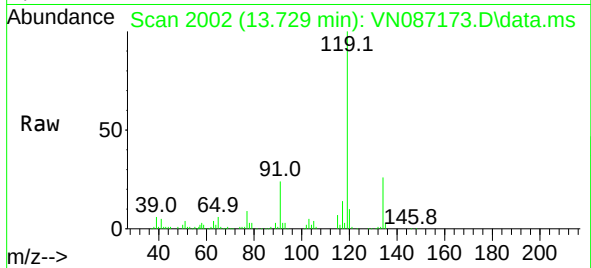




#79
tert-butylbenzene
Concen: 14.899 ug/l
RT: 13.729 min Scan# 20
Delta R.T. 0.294 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

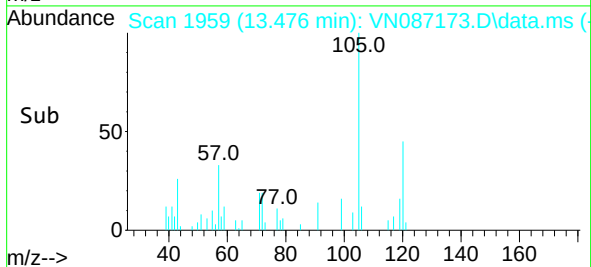
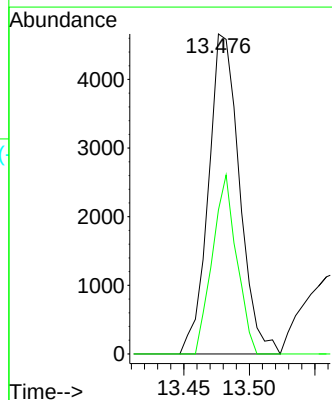
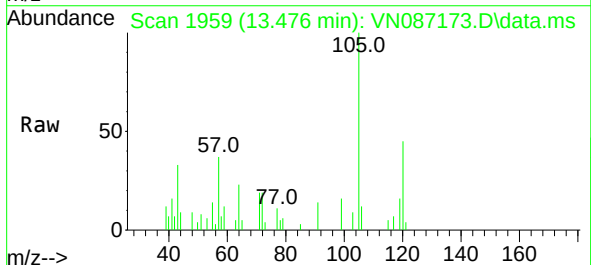
Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)

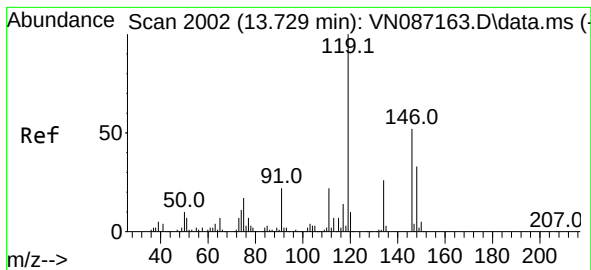
Tgt Ion:119 Resp: 104798
Ion Ratio Lower Upper
119 100
91 24.2 0.0 137.0
134 25.6 0.0 49.4



#80
1,2,4-Trimethylbenzene
Concen: 0.914 ug/l
RT: 13.476 min Scan# 1959
Delta R.T. -0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Tgt Ion:105 Resp: 7682
Ion Ratio Lower Upper
105 100
120 43.6 0.0 94.0





#82

p-Isopropyltoluene

Concen: 12.315 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. 0.000 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

Instrument :

MSVOA_N

ClientSampleId :

002-35TH-AVE(JUNE)

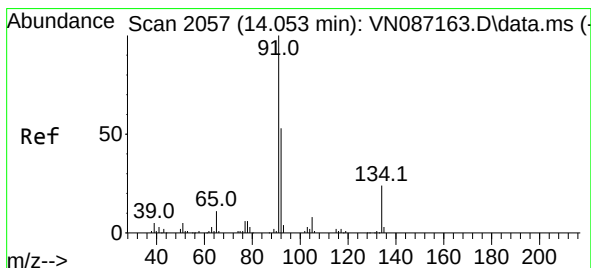
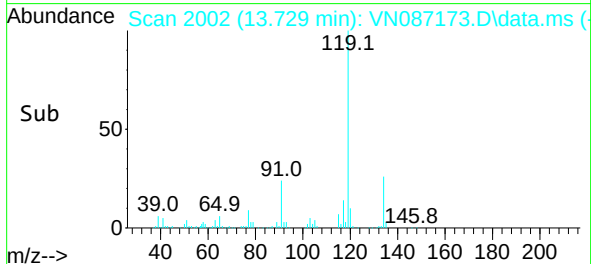
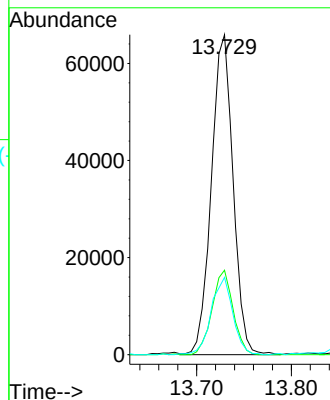
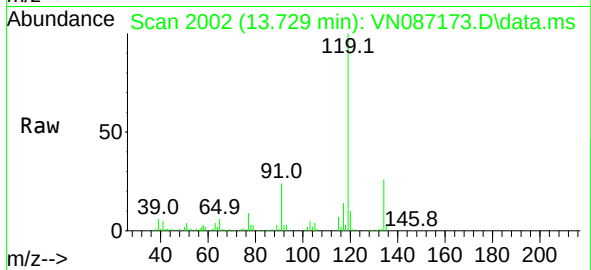
Tgt Ion:119 Resp: 104798

Ion Ratio Lower Upper

119 100

134 25.6 0.0 51.2

91 24.2 0.0 46.4



#85

n-Butylbenzene

Concen: 0.215 ug/l

RT: 14.053 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VN087173.D

Acq: 25 Jun 2025 13:33

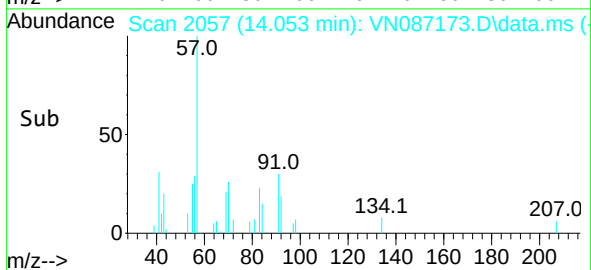
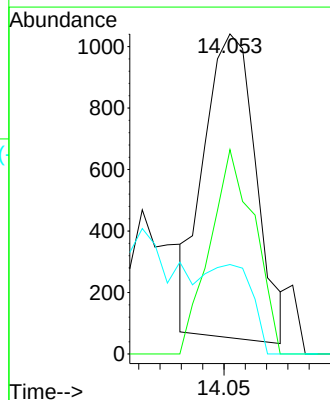
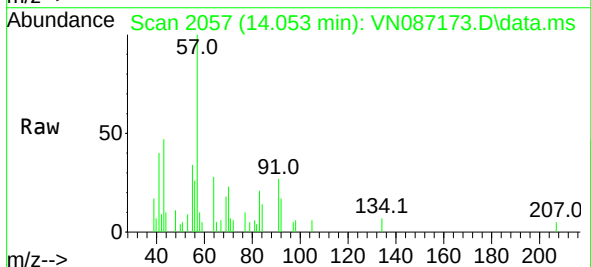
Tgt Ion: 91 Resp: 1666

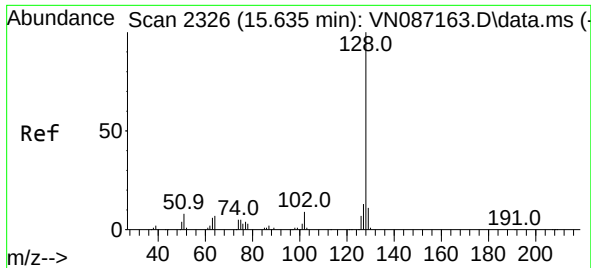
Ion Ratio Lower Upper

91 100

92 58.0 0.0 106.4

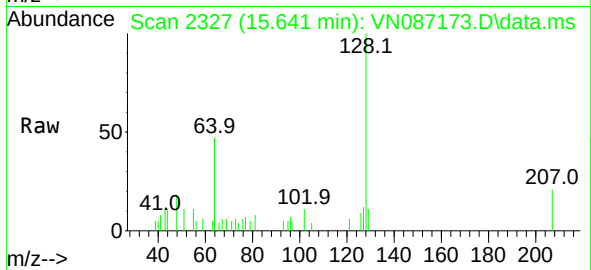
134 27.3 0.0 48.8





#91
Naphthalene
Concen: 0.703 ug/l
RT: 15.641 min Scan# 21
Delta R.T. 0.006 min
Lab File: VN087173.D
Acq: 25 Jun 2025 13:33

Instrument :
MSVOA_N
ClientSampleId :
002-35TH-AVE(JUNE)



Tgt Ion:128 Resp: 7082
Ion Ratio Lower Upper
128 100
127 11.3 10.6 15.8
129 11.7 8.8 13.2

