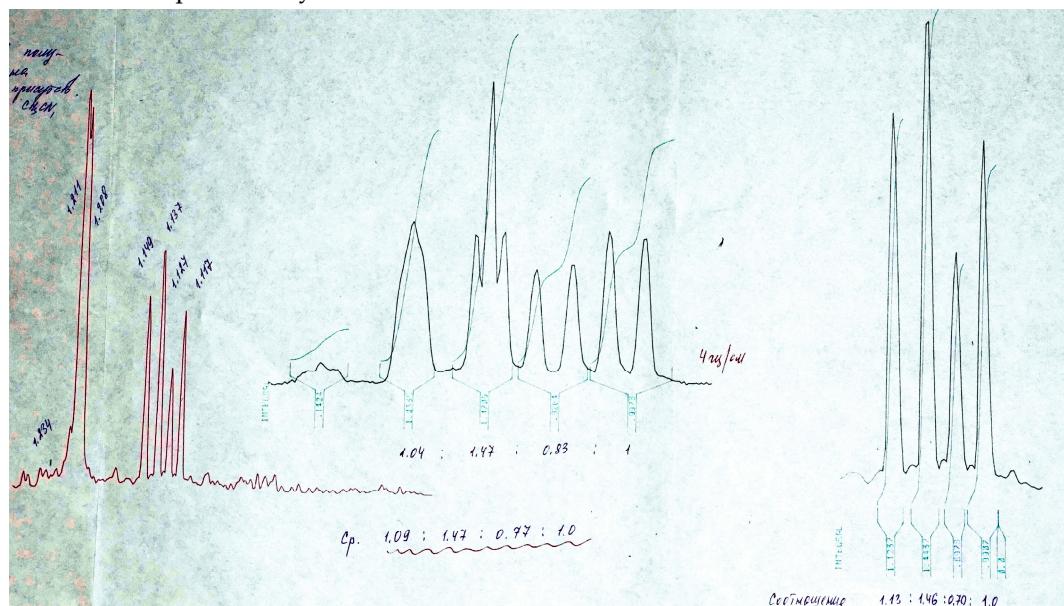
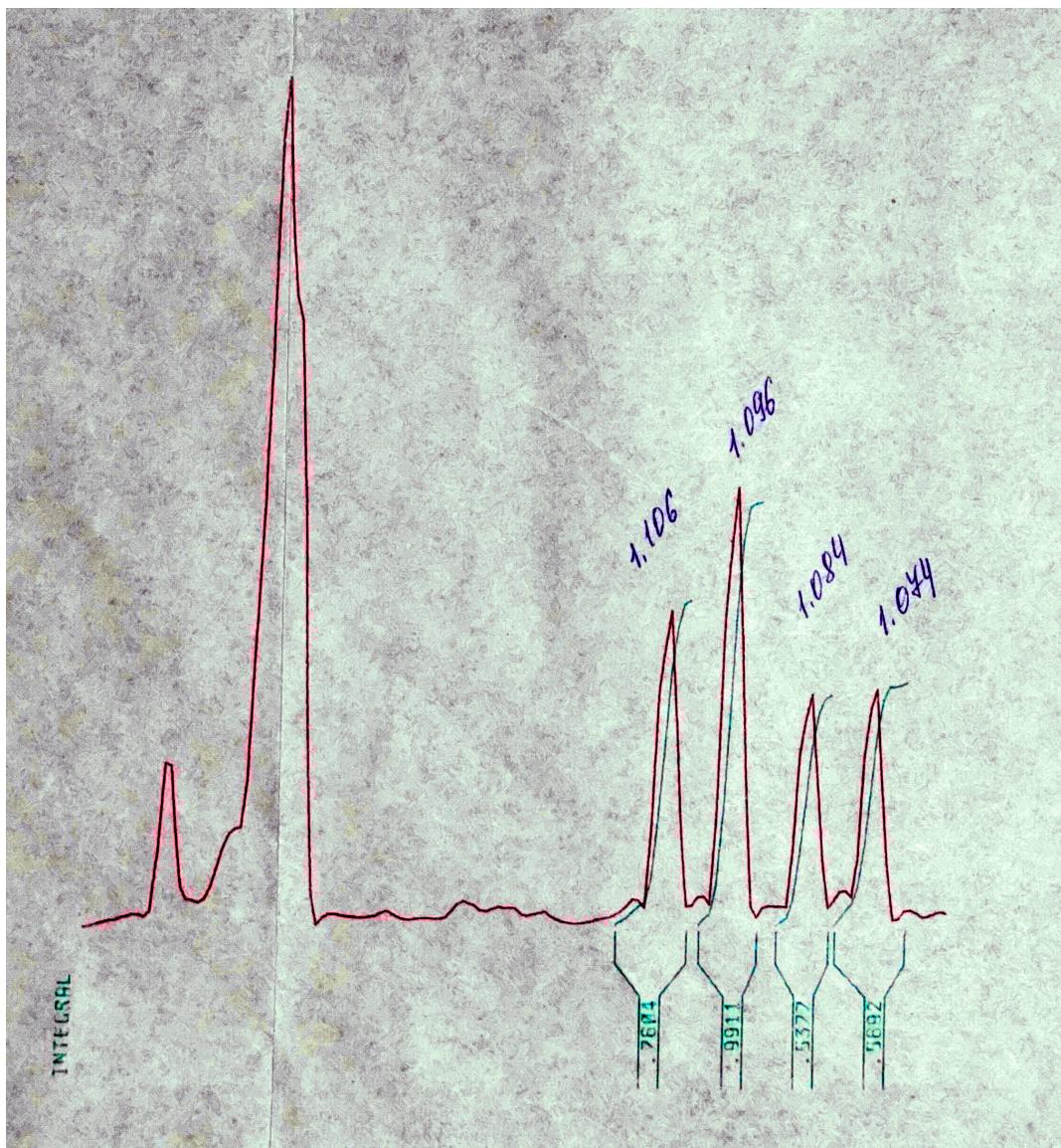


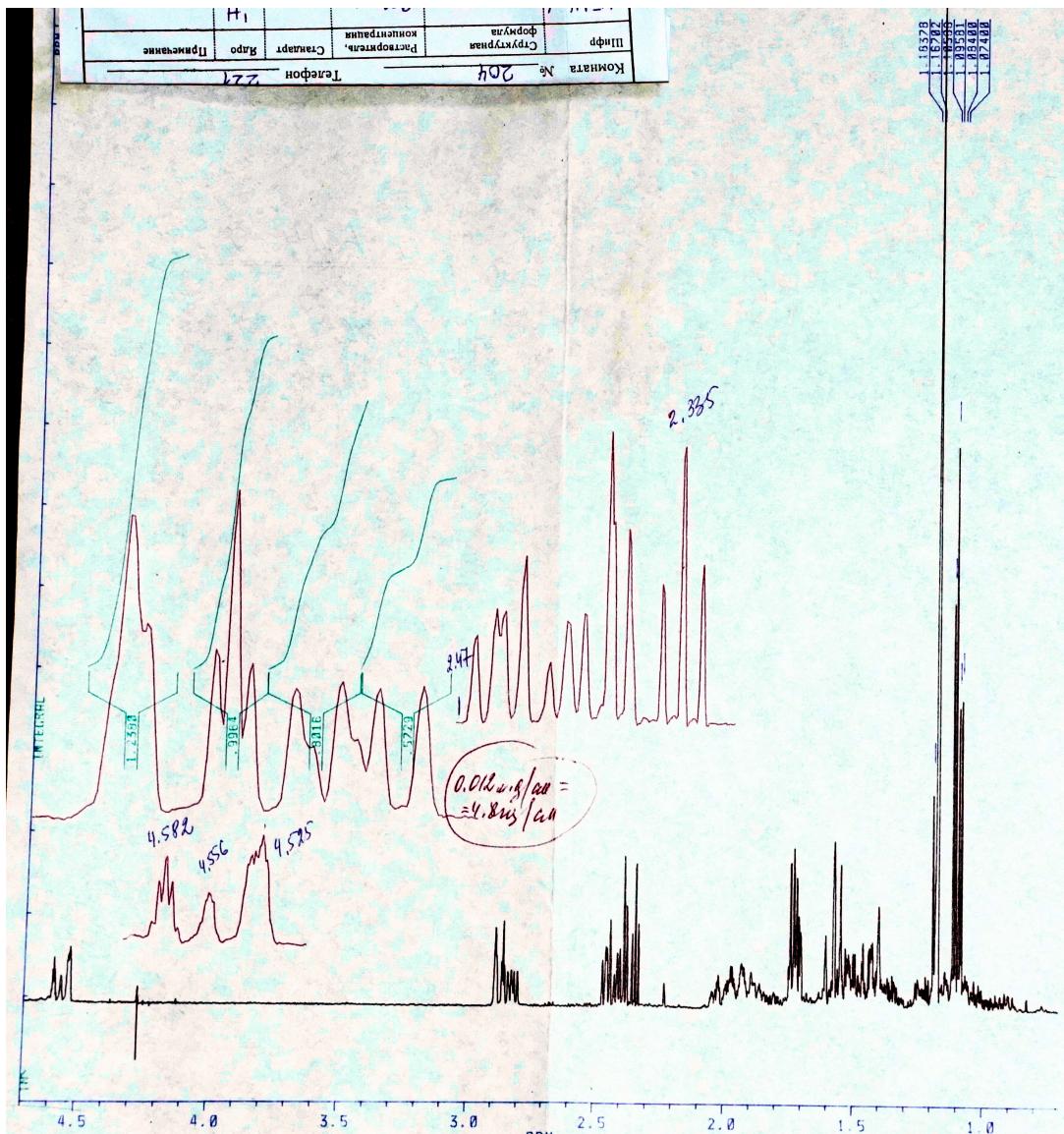
¹H-NMR compound 8, synthesis var1

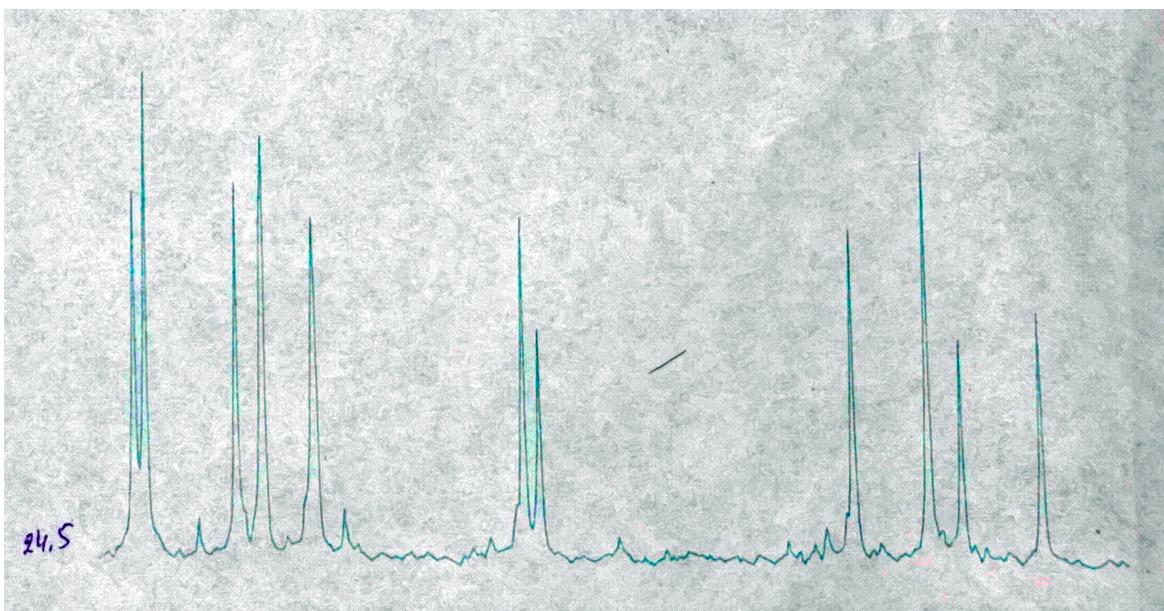


¹H-NMR compound 8, synthesis var1 determination of the ratio of isomers

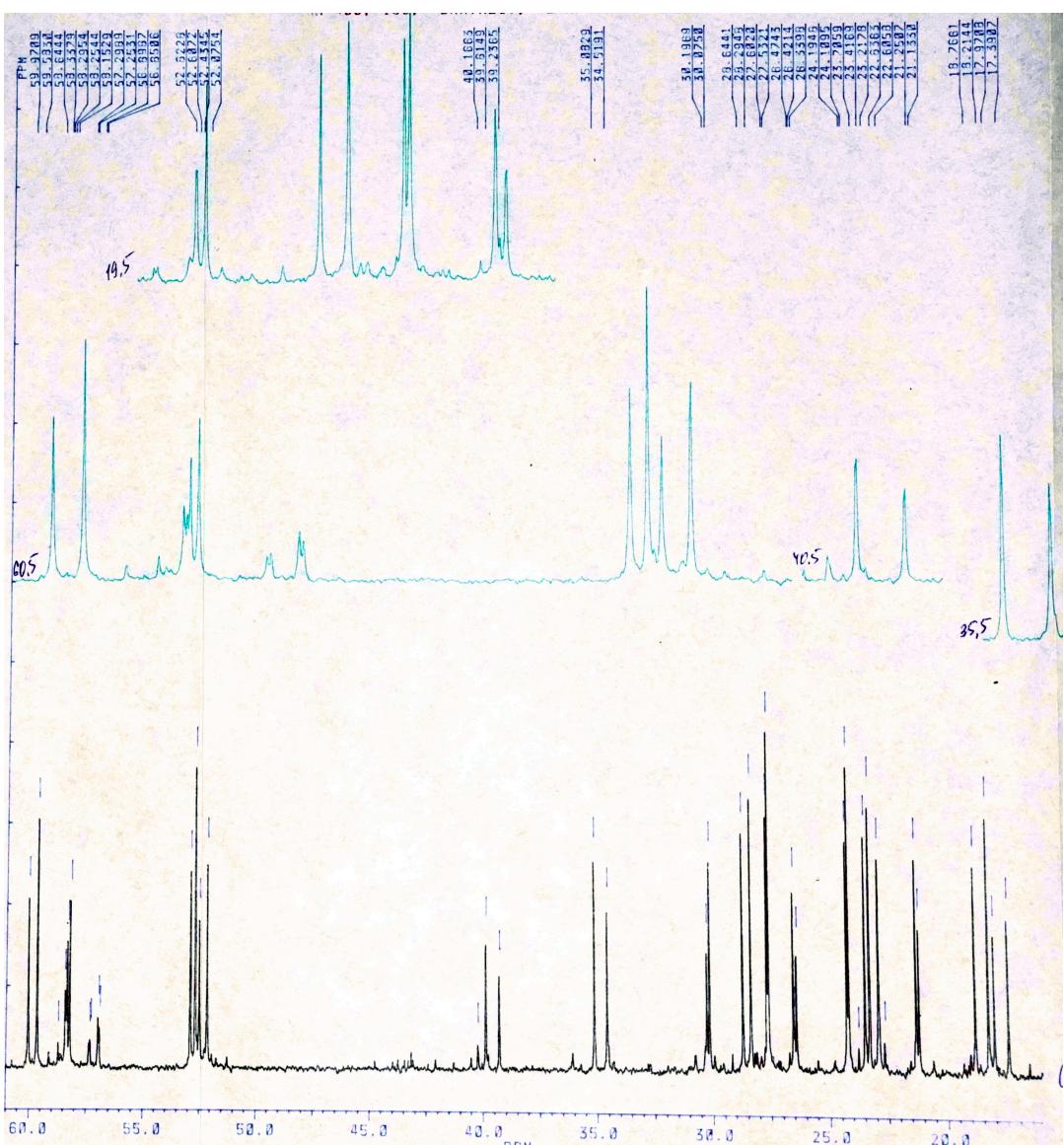


¹H-NMR compound 8, synthesis var2 determination of the ratio of isomers

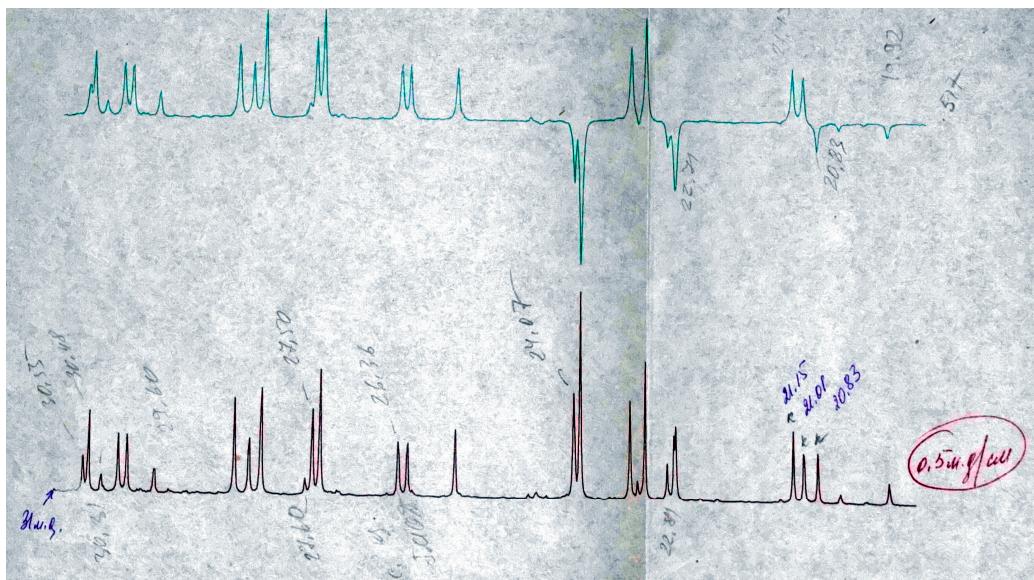




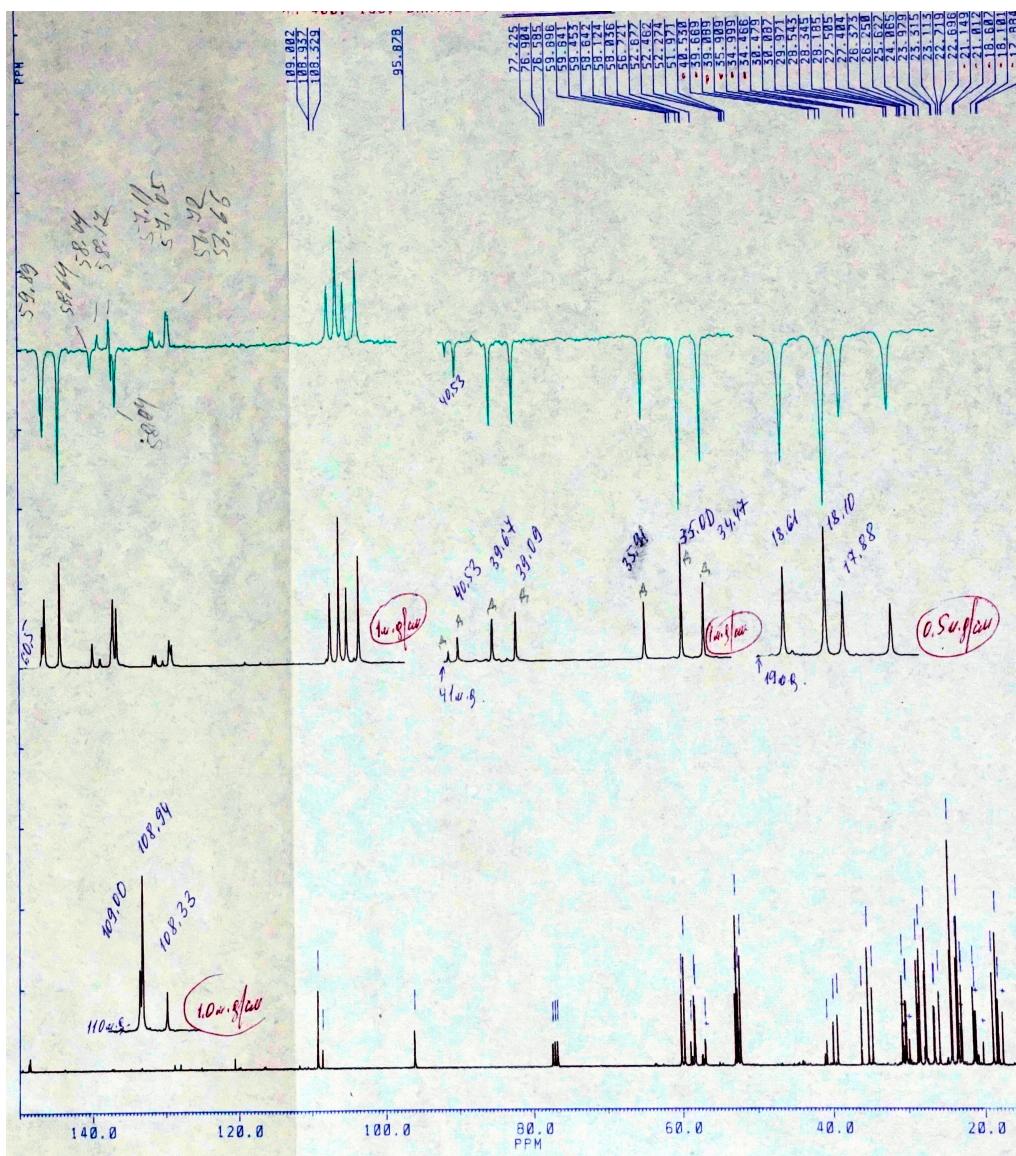
13C-NMR compound 8, synthesis var1 domain 24.5ppm



13C-NMR compound 8, synthesis var1

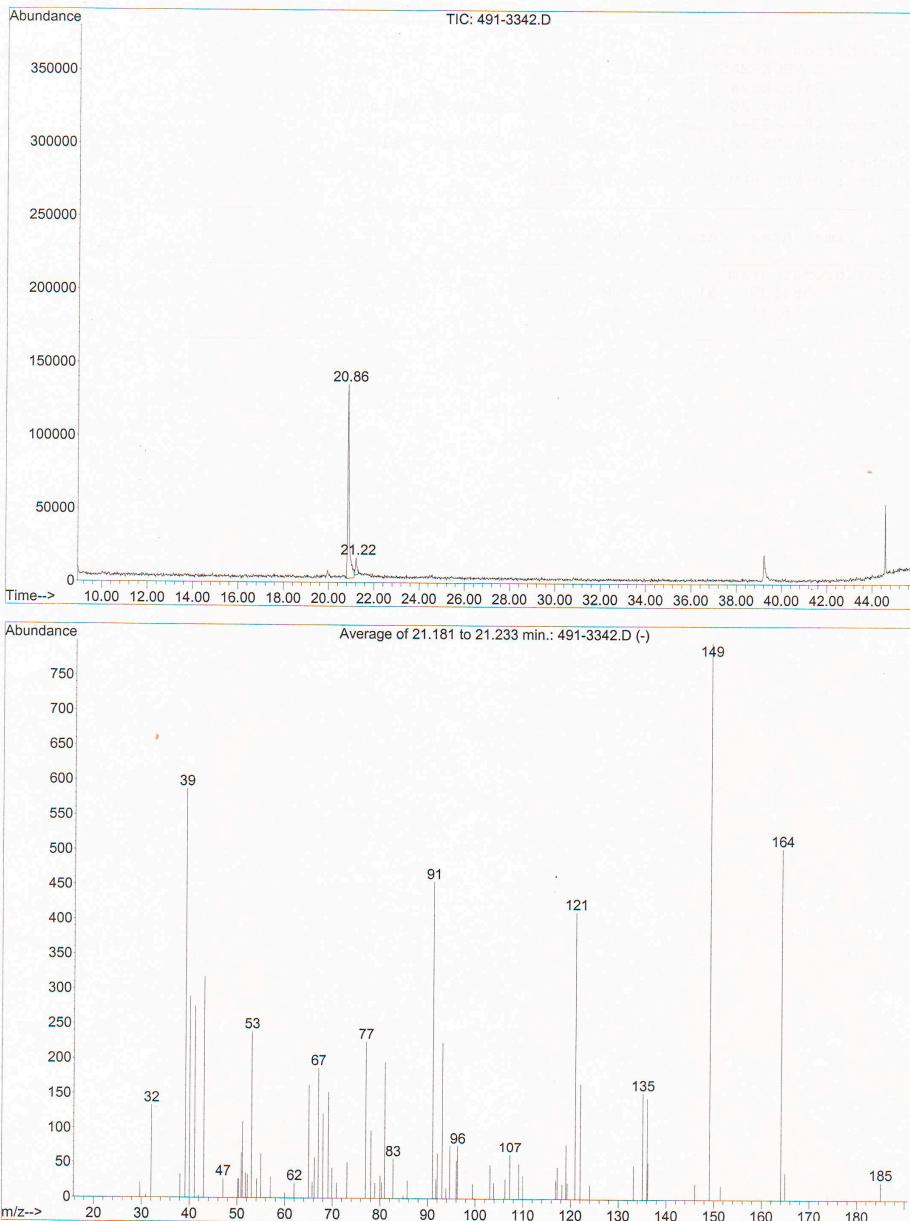


13C-NMR compound 8, synthesis var2 domain 31ppm



13C-NMR compound 8, synthesis var2

File : D:\BOX-MASS\491-3342.D
 Operator : Salnikova O.I.
 Acquired : 24 Nov 2008 2:20 pm using AcqMethod AN4-300Q
 Instrument : 5971 - In
 Sample Name: 49-1-33-42 Laev
 Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms170
 Vial Number: 1



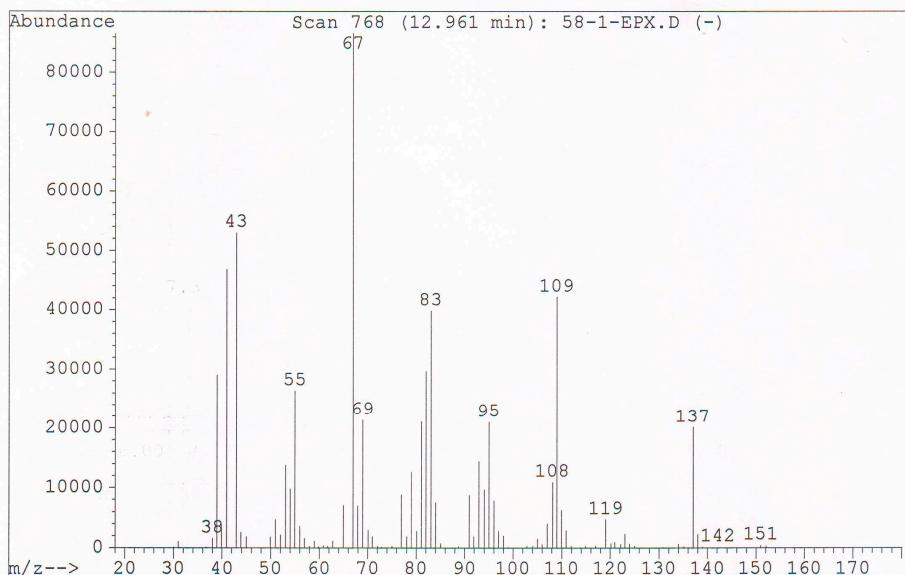
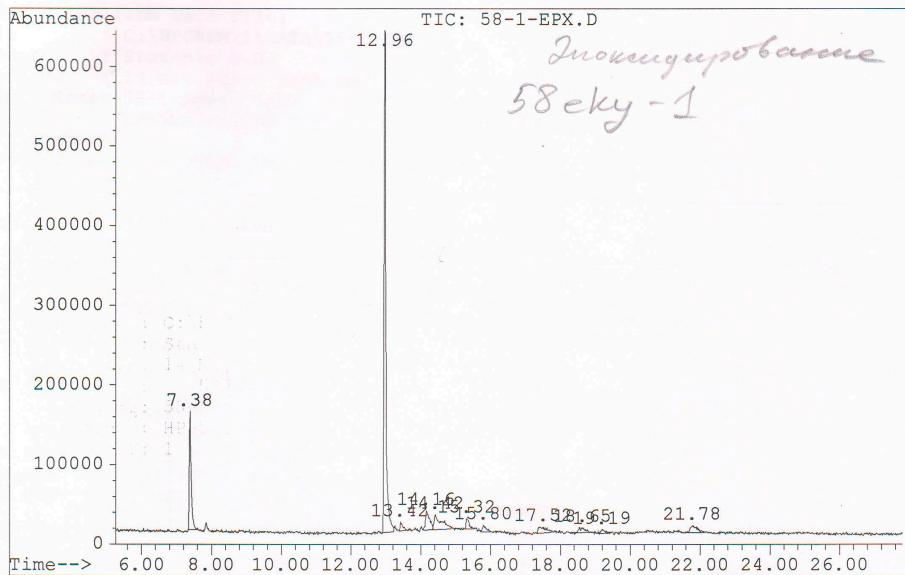
GLC-MS 3-carene allyl oxydation 1page CAR-3-EN-2-ONE

Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms170
 Vial Number: 1
 CurrentMeth: D:\HPCHEM\2\METHODS\ANALIZ.M

Retention Time	Area	Area %	Name
<hr/>			
Total Ion Chromatogram			
20.856	584539	91.153	MM=150 m.b. car-3-en-5-one
21.220	56731	8.847	MM=164

GLC-MS 3-carene allyl oxydation 2page CAR-3-EN-2-ONE

Sample Name: 58-1-epox Laev
 Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms130
 Vial Number: 1



GLC-MS alpha-pinene epoxide distilled 1page

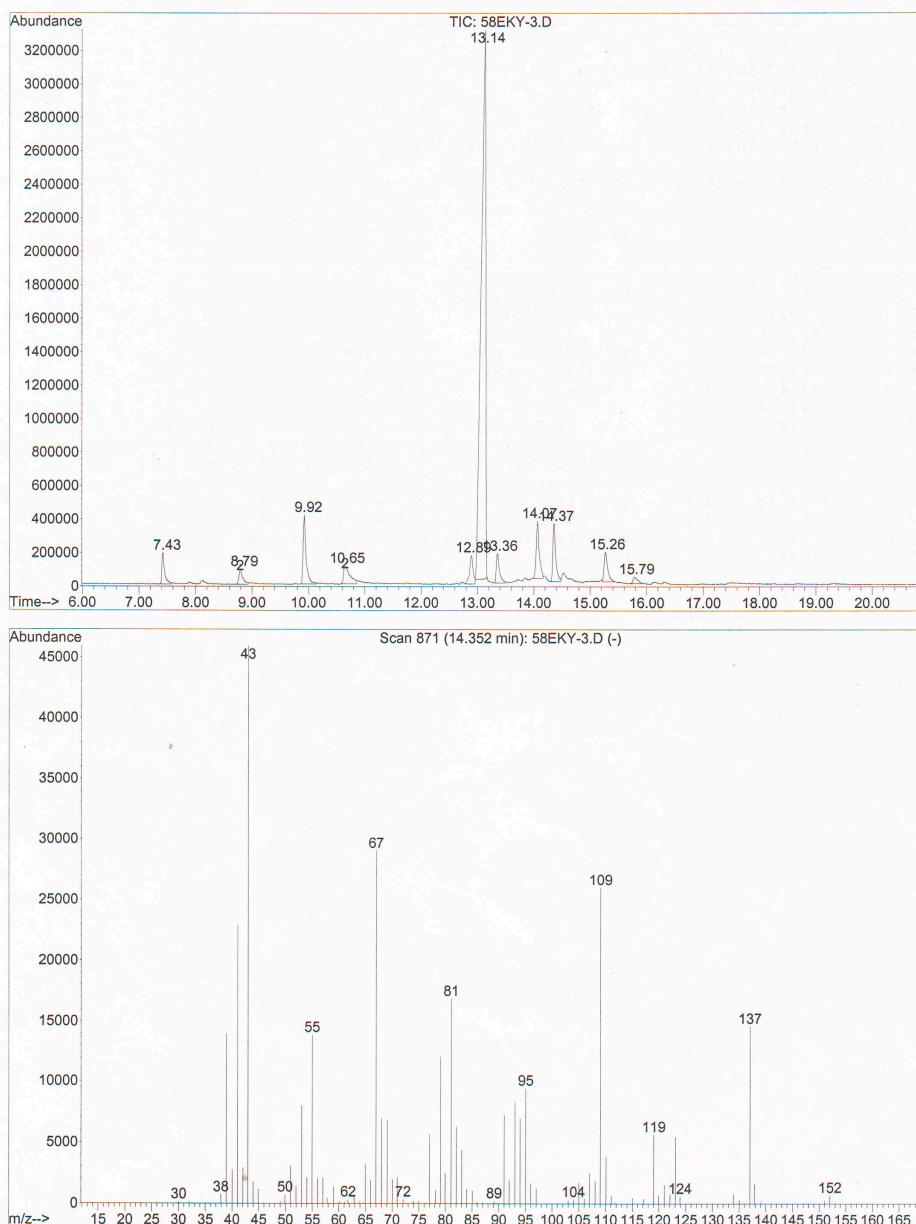
Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms130
 Vial Number: 1
 CurrentMeth: C:\HPCHEM\1\METHODS\DEFAULT.M

Retention Time	Area	Area %	Name
Total Ion Chromatogram			
7.384	515759	13.192	<i>alpha - pinene</i>
12.961	2350703	60.124	<i>Pinusungu alpha - pinene</i>
13.417	58596	1.499	
14.158	198884	5.087	
14.419	272166	6.961	
15.317	79931	2.044	
15.799	64682	1.654	
17.515	125776	3.217	
18.647	81179	2.076	
19.193	37727	0.965	
21.781	124353	3.181	

alpha - pinene
Pinusungu alpha - pinene

GLC-MS alpha-pinene epoxide distilled 2page

Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms130
 Vial Number: 1



GLC-MS alpha-pinene epoxide mixture 1page

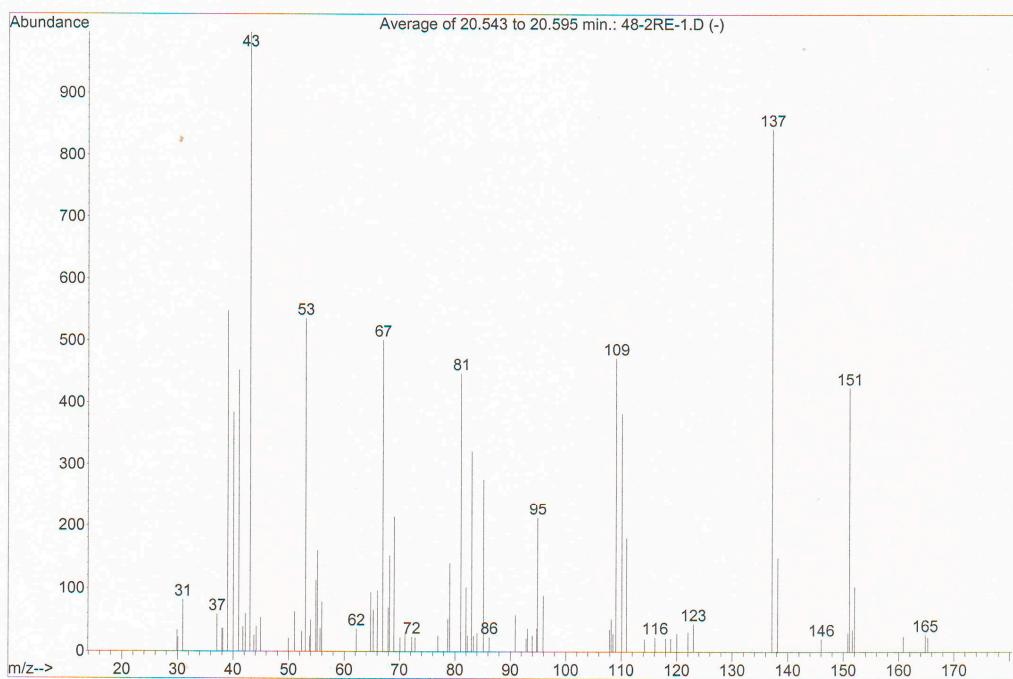
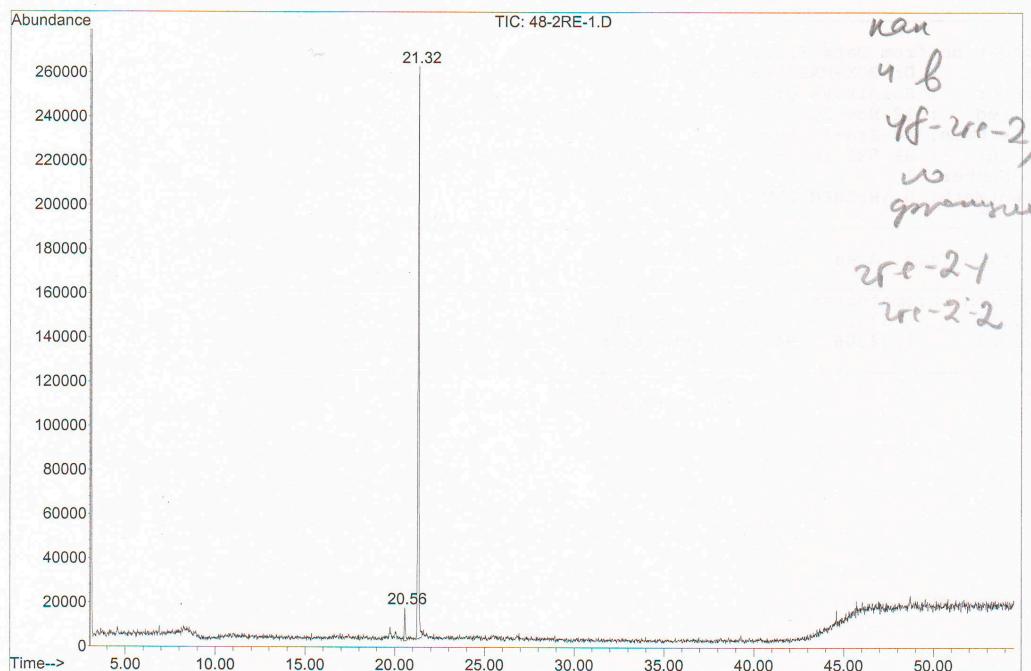
Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m10 ms130
 Vial Number: 1
 CurrentMeth: C:\HPCHEM\1\METHODS\DEFAULT.M

Retention Time	Area	Area %	Name
<hr/>			
Total Ion Chromatogram			
7.427	719476	2.652	m.b. alpha-pinene
8.793	410289	1.512	m.b. beta-pinene
9.924	1471348	5.424	m.b. 3-carene
10.653	941090	3.469	m.b. dl-Limonene (Dipentene)
12.892	696582	2.568	MM=152 m.b. fencholenic aldehyde
13.140	18272489	67.358	m.b. alpha-pinene epoxide
13.362	644614	2.376	MM=152
14.065	1402876	5.171	m.b. .ALPHA.-CAMPHOLENE ALDEHYDE (Cyclopentane-carboxaldehyde, 1,2,2,3-tetramethyl-) or m.b. .alpha.-Campholenic aldehyde (2,2,3-Trimethyl-3-cyclopentacetaldehyde)
14.365	1272748	4.692	m.b. trans-3,4-epoxycarane
15.265	880852	3.247	m.b. Pinocamphone (trans-3-pinanone)
15.786	241895	0.892	m.b. Isopinocamphone (cis-3-pinanone)
17.517	173133	0.638	m.b. verbenone

GLC-MS alpha-pinene epoxide mixture 2page

Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m5 ms170
Vial Number: 1

b4



GLC-MS car-3-en-2,5-dione 1page

Misc Info : HP-5MS inj280 2m50 4d/m200 20d/m300m5 ms170
Vial Number: 1
CurrentMeth: D:\HPCHEM\2\METHODS\ANALIZ.M

Retention Time	Area	Area %	Name
----------------	------	--------	------

Total Ion Chromatogram

20.556	57621	5.136	m.b. MM=166
21.323	1064306	94.864	MM=164 m.b. car-3-en-2,5-dione

GLC-MS car-3-en-2,5-dione 2page

PVV - 3; CCL4; CMS

2.6172
2.2627
2.2243
2.1803
2.1446
2.1089
2.0677
2.0292
1.9880
1.9220
1.5978
1.5868
1.5731
1.5044
1.4412
1.4302
1.3616
1.3506
1.2132
1.1994
1.1610
1.0428
1.0209
0.9879
0.9247
0.8890
0.8505
0.6939
0.5126
0.5016
0.4659
0.4549
0.4219
0.3807
0.3697
0.3340
0.0400



*** Current Data Parameters ***

NAME : ROMANI

EXPNO : 1

PROCNO : 1

*** Acquisition Parameters ***

NS : 16

O1 : 4000.00 Hz

O2 : 0.00 Hz

*** Processing Parameters ***

LB : 0.00 Hz

SF : 200.1328703 MHz

SW_P : 4504.50-5044

*** 1D NMR Plot Parameters ***

SR : 2870.27 Hz

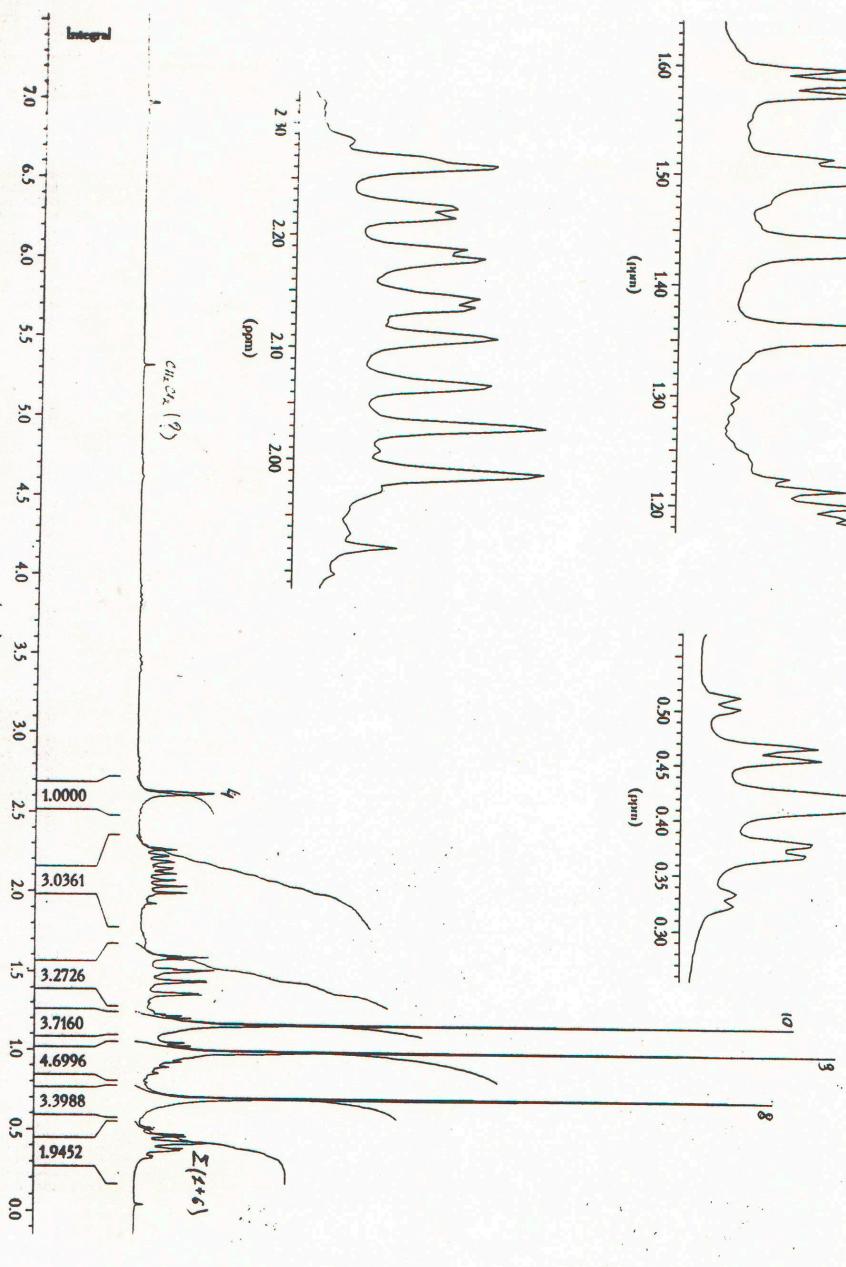
PPM_CM : 0.35°

Hz_Cm : 70.06

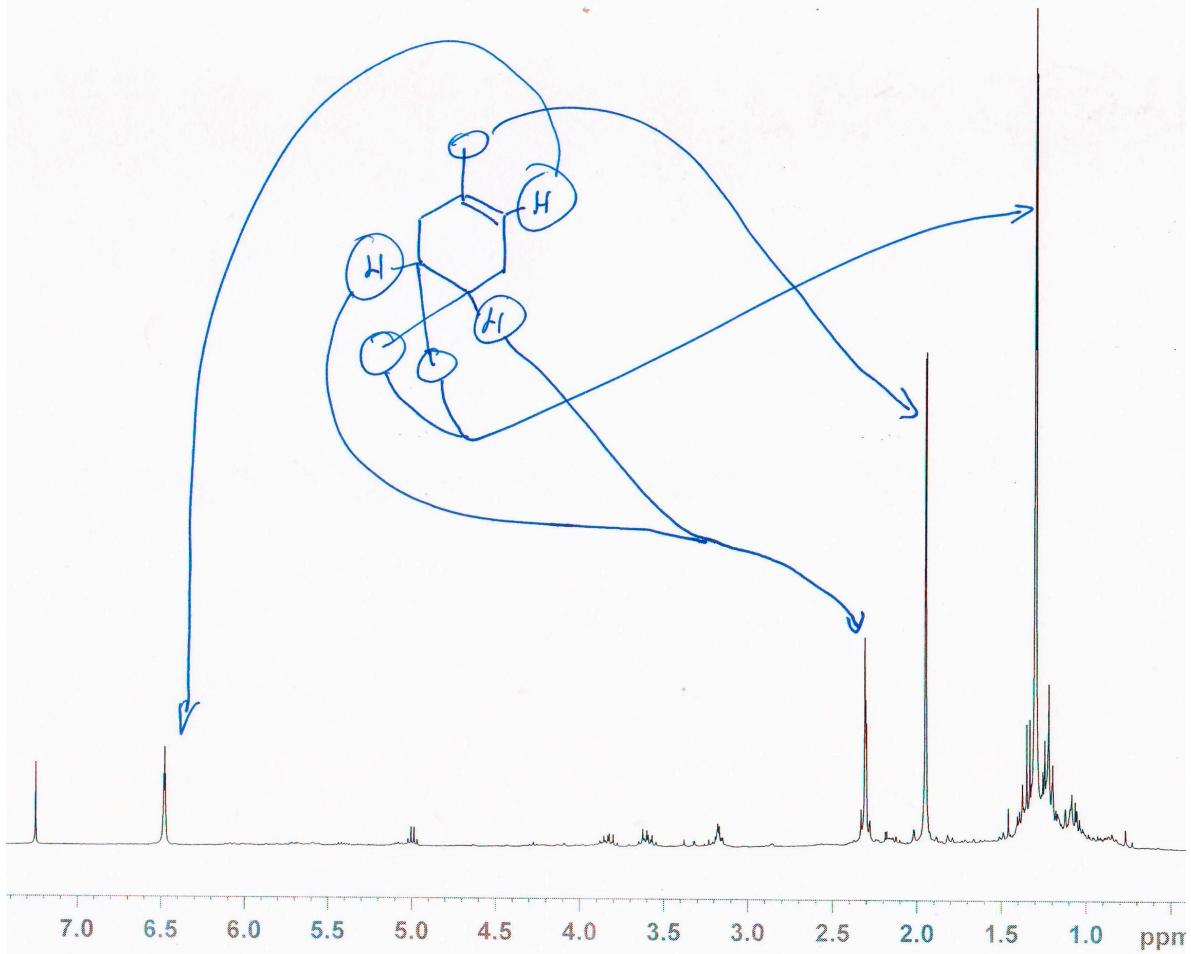
*** Aspect 3000 Parameter ***

O1 : 4000.00 Hz

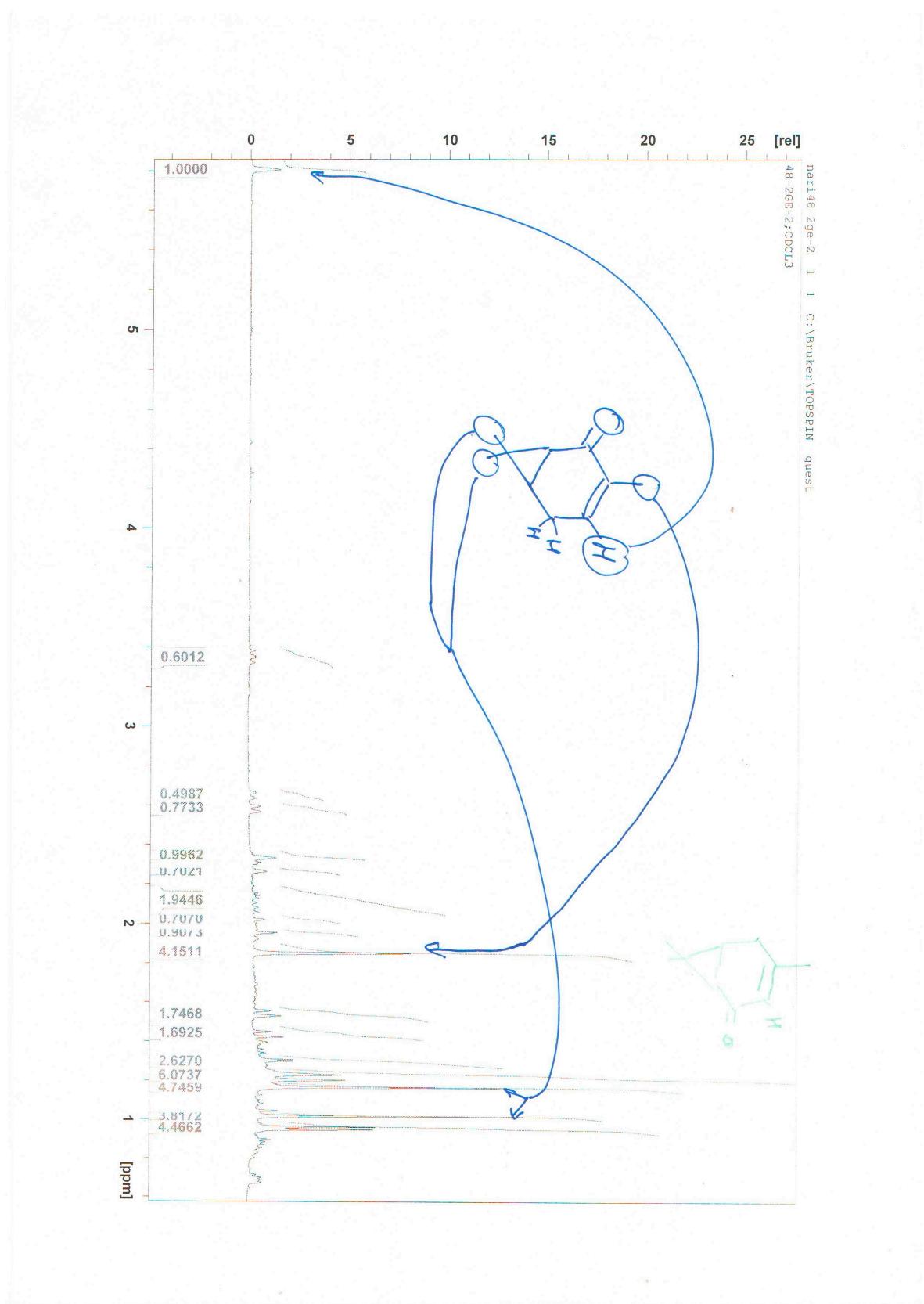
O2 : 0.00 Hz



H-NMR 3-carene epoxide

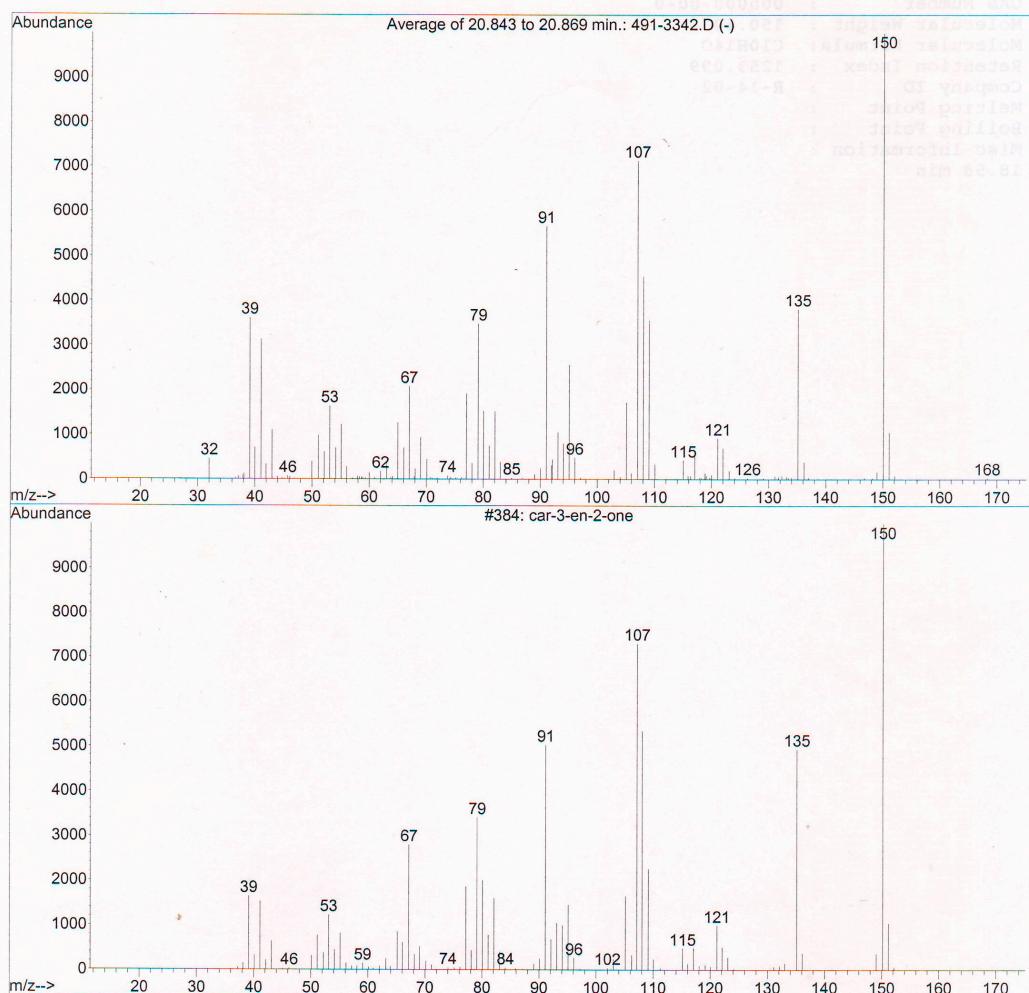


H-NMR 3-carene



H-NMR of car-3-en-2-one

Library Searched : L:\AVT_LIB.L
Quality : 93
ID : car-3-en-2-one



MS car-3-en-2-one from library