

Supplementary material to:

G.A. Boyle, T. Govender, H.G. Kruger and G.E.M. Maguire, *S. Afr. J. Chem.*, 2009, **62**, 113–123.

Supplementary Information

Synthesis of novel 3-hydroxy-3-pyridylcamphor derivatives

Grant A. Boyle^a, Thavendran Govender^b, Hendrik G. Kruger^{a,*}, Glenn E.M Maguire^a

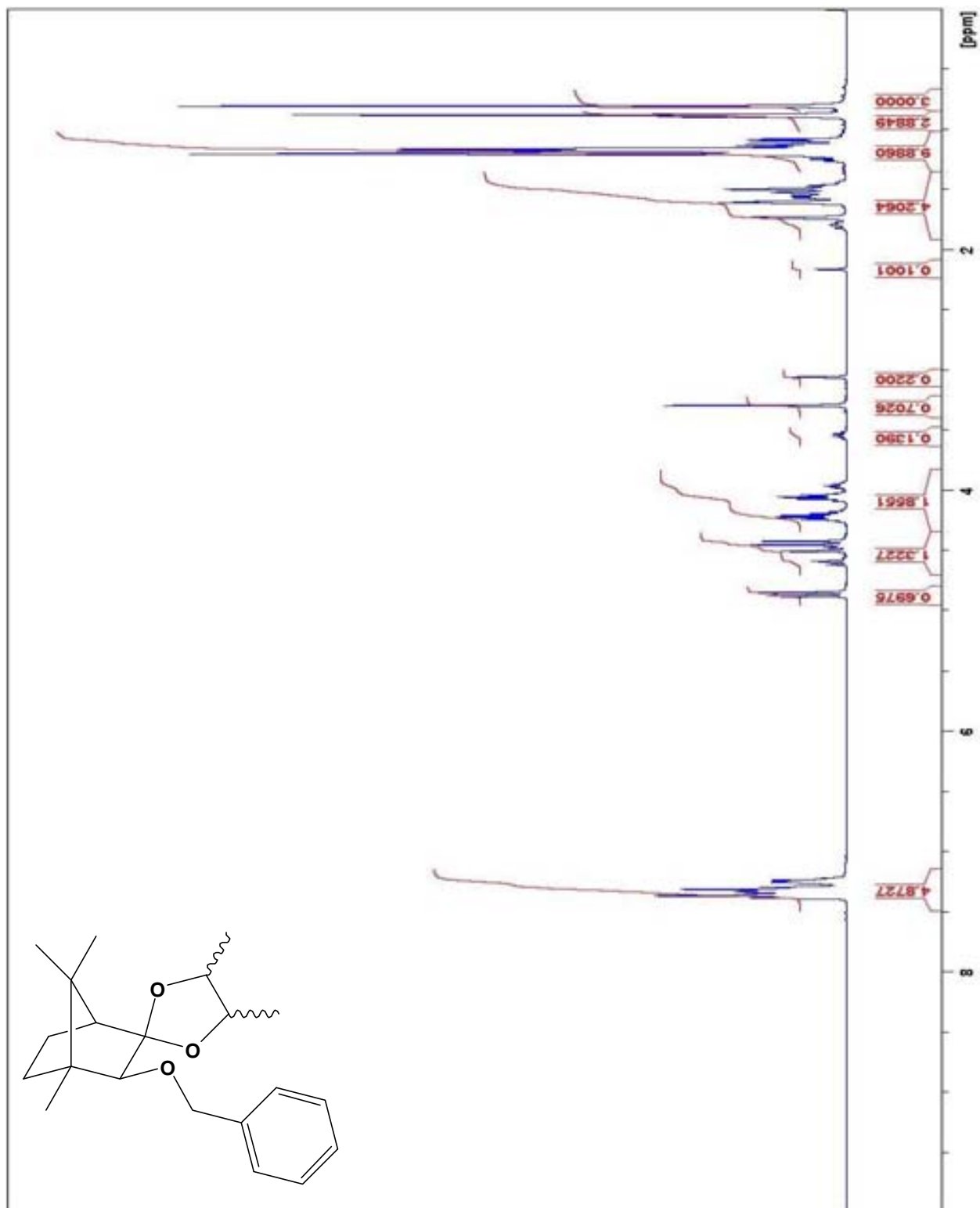
^a School of Chemistry, University of KwaZulu-Natal, Durban, 4000, South Africa

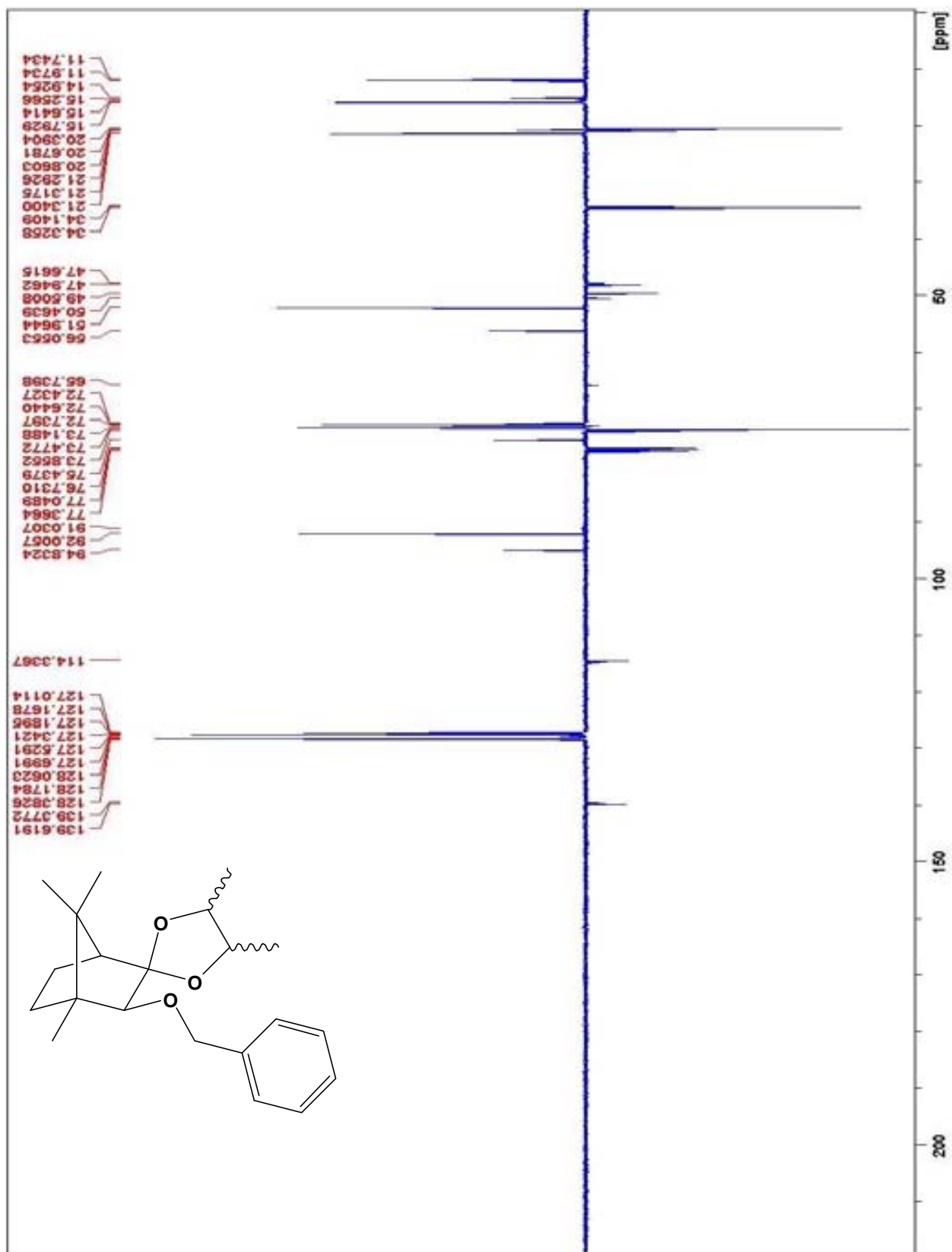
^b School of Pharmacy and Pharmacology, University of KwaZulu-Natal, Durban, 4000, South Africa

* Corresponding Author: email: kruger@ukzn.ac.za, Tel: +27 2602181.

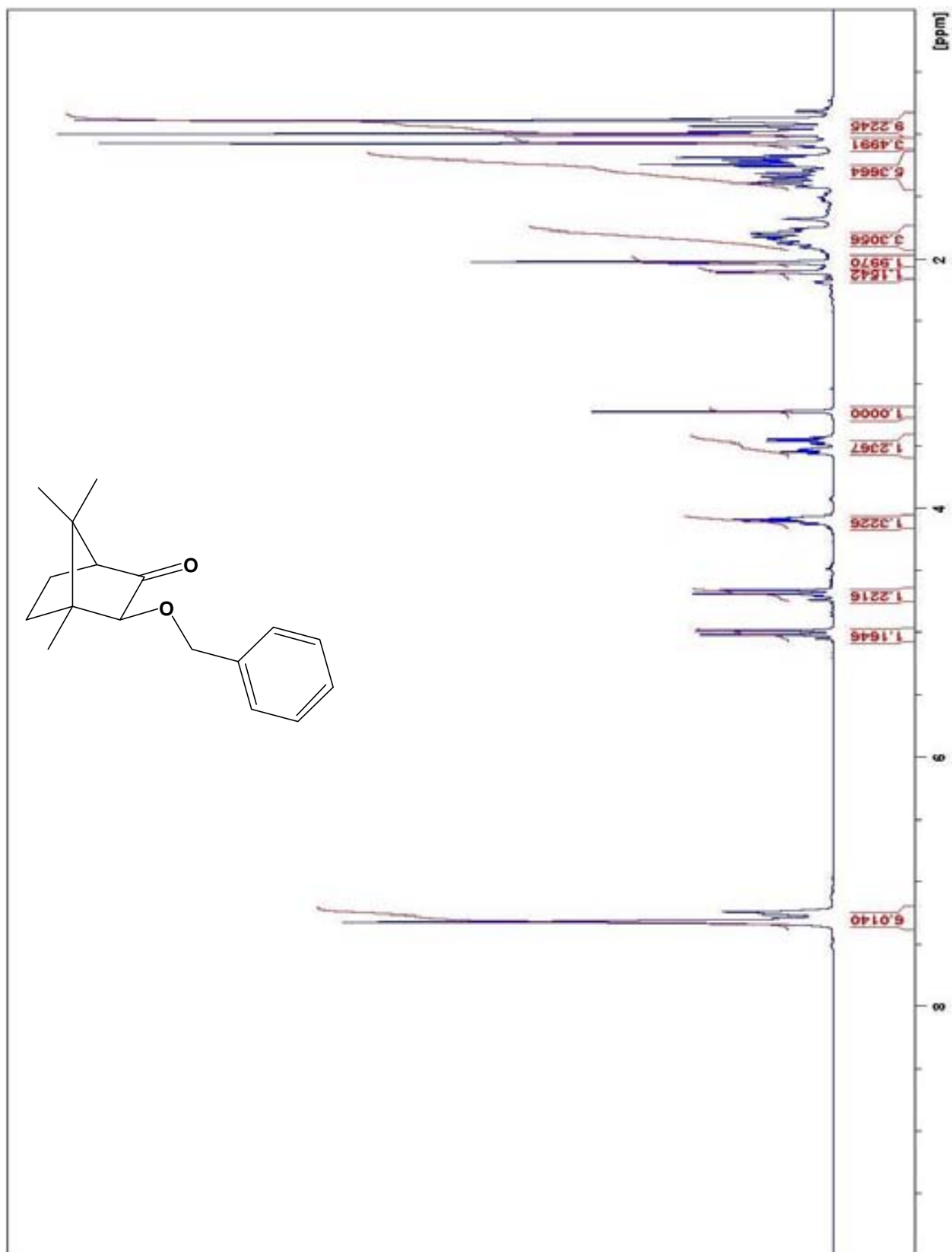
Table of contents

	Page
1) ¹ H and ¹³ C APT NMR spectra of novel compounds	2
2) Diastereomeric determinations	25
3) 2D NMR Spectra of selected compounds	30

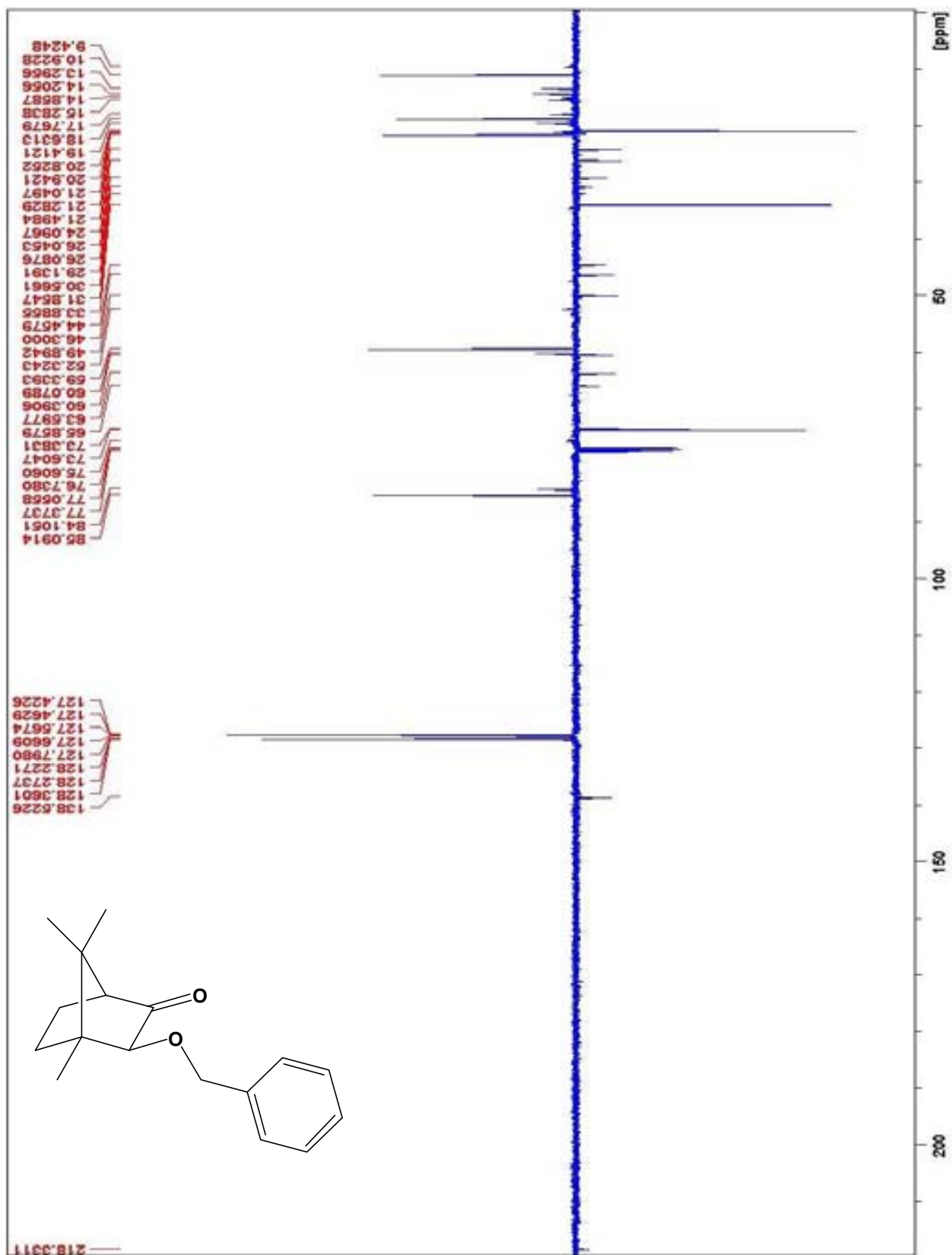
SECTION 1: ^1H AND ^{13}C APT NMR SPECTRA OF NOVEL COMPOUNDS ^1H NMR Spectrum (400 MHz) of Compound 11



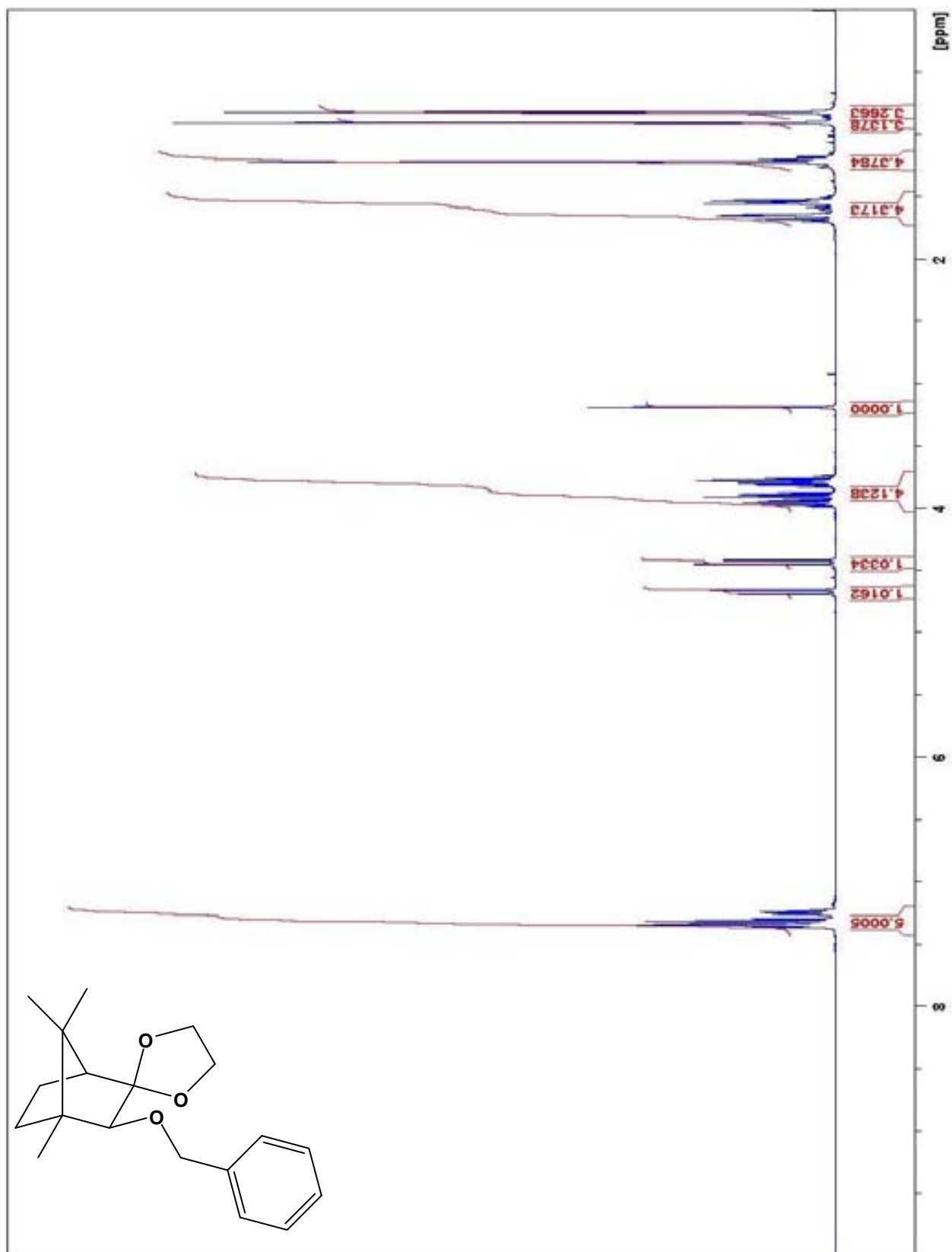
¹³C APT NMR Spectrum (400MHz) of Compound 11



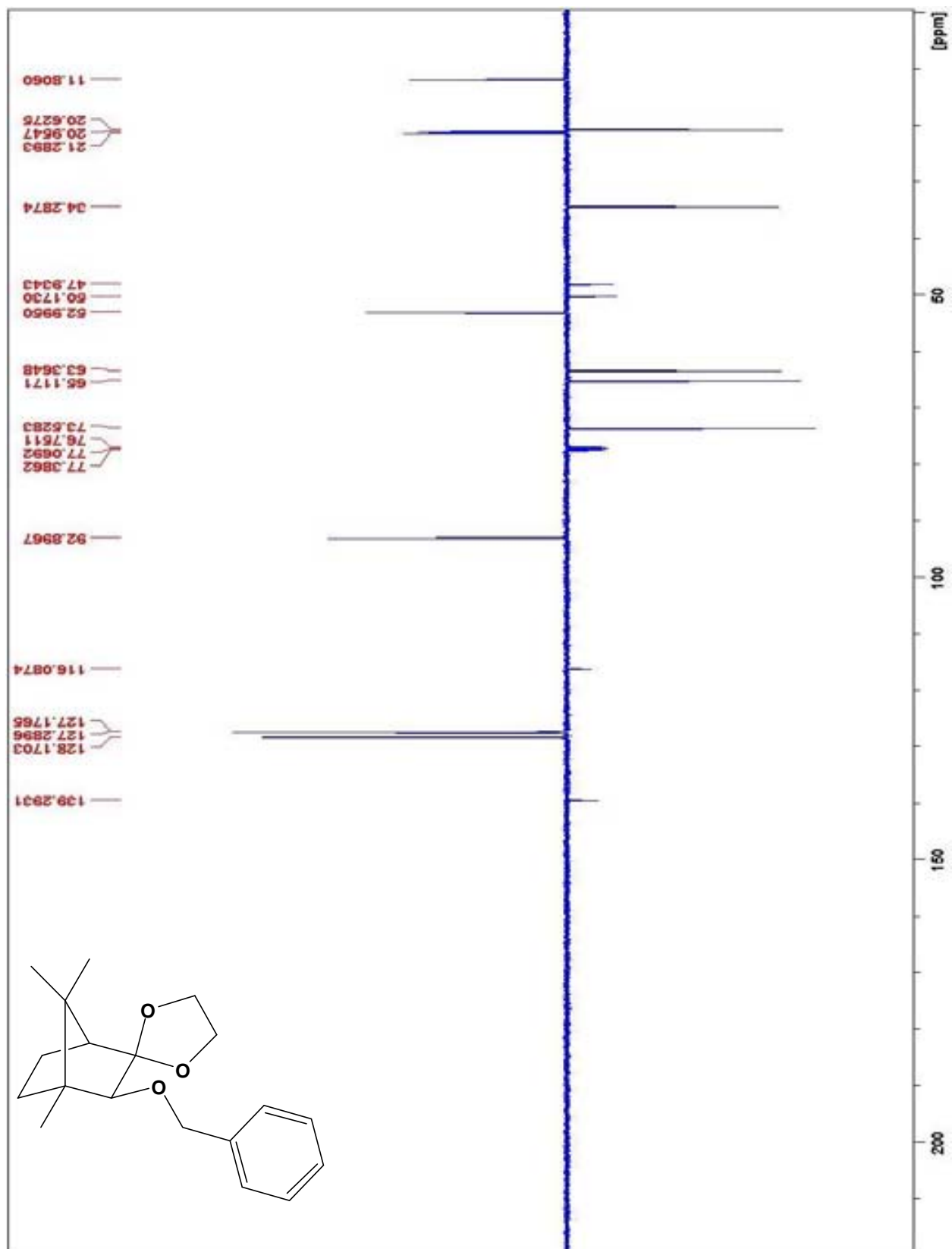
¹H NMR Spectrum (400 MHz) of Compound 12 obtained from Method A



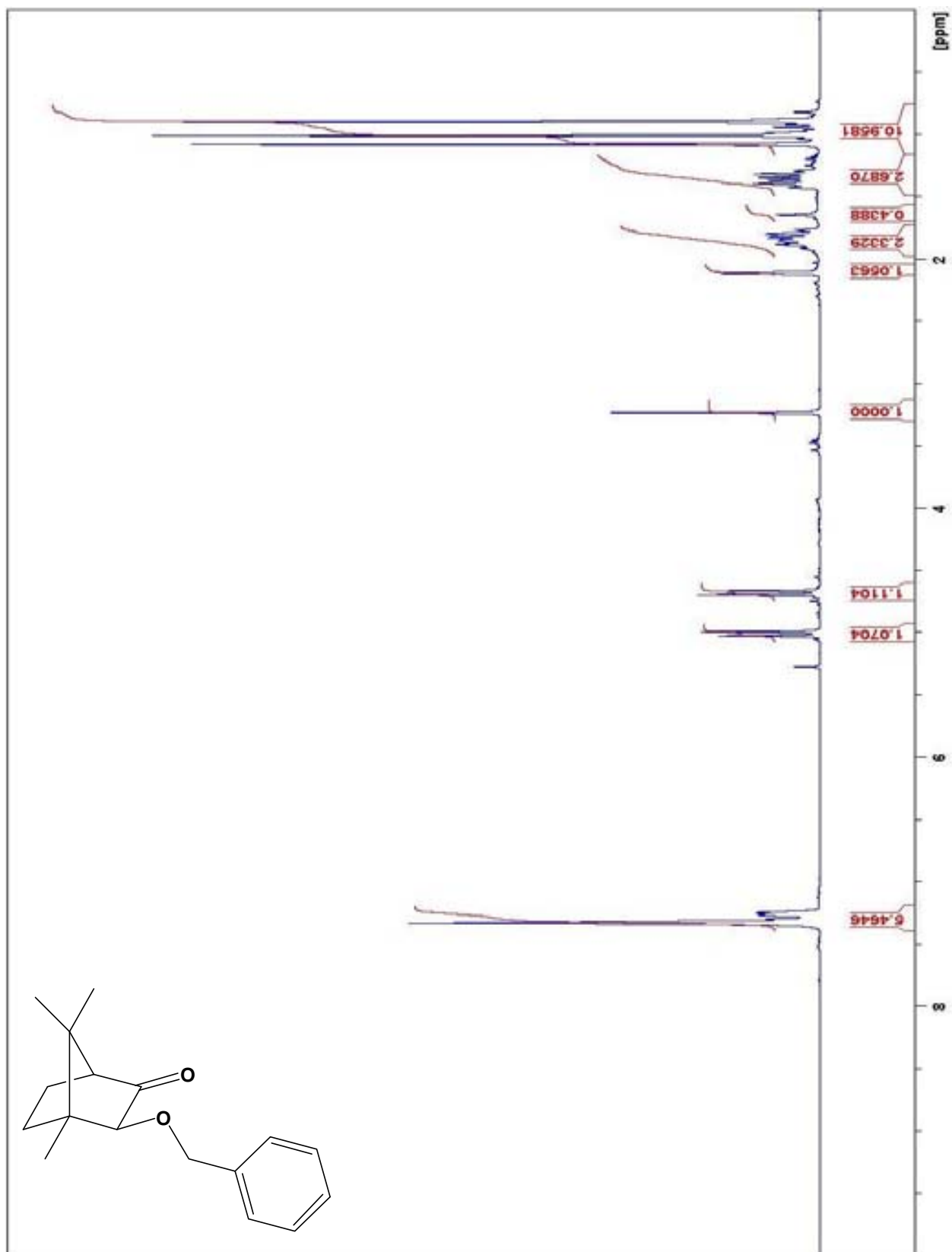
¹³C APT NMR Spectrum (400 MHz) of Compound 12 obtained from Method A



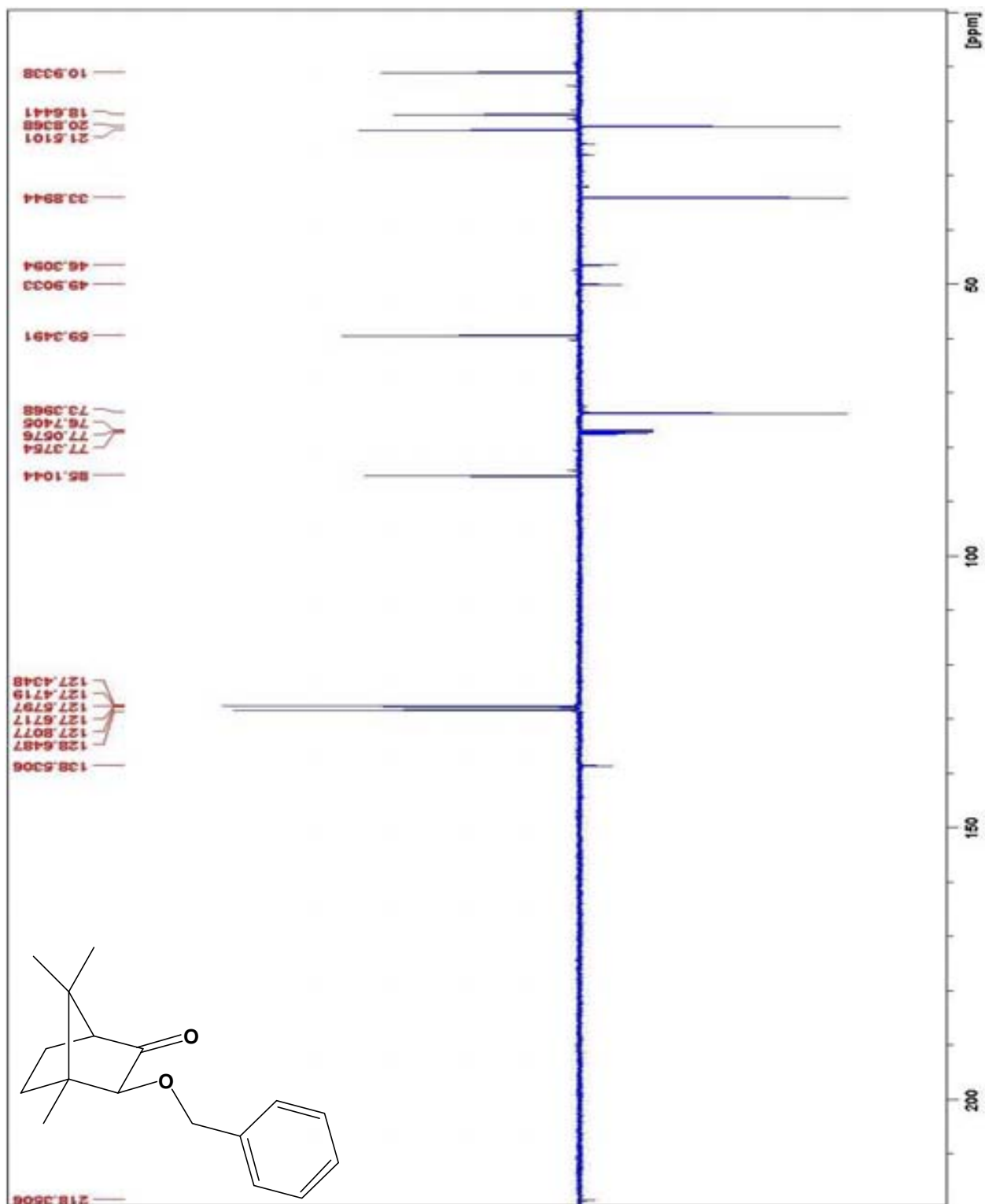
¹H NMR Spectrum (400 MHz) of Compound 15



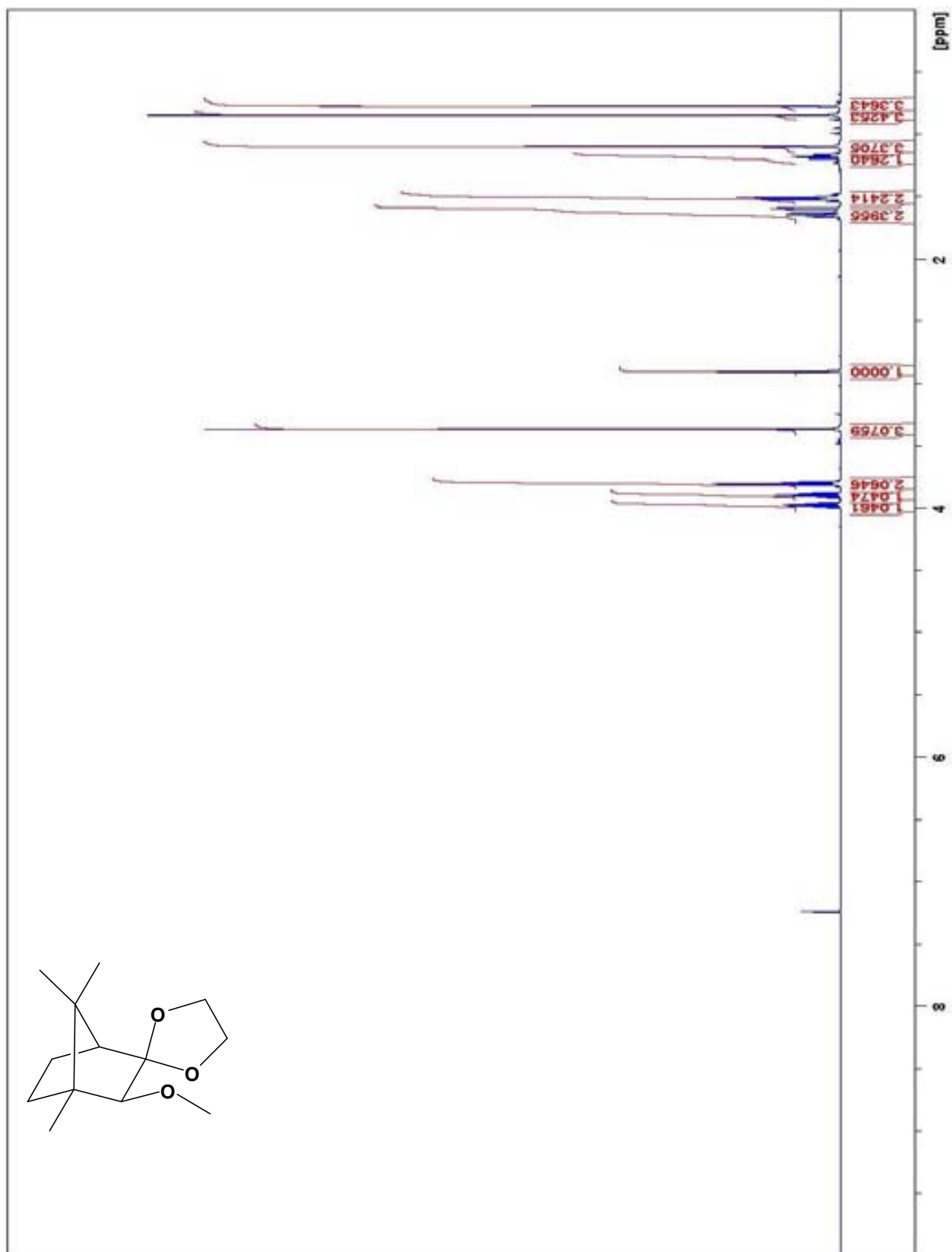
^{13}C APT NMR Spectrum (400 MHz) of Compound 15



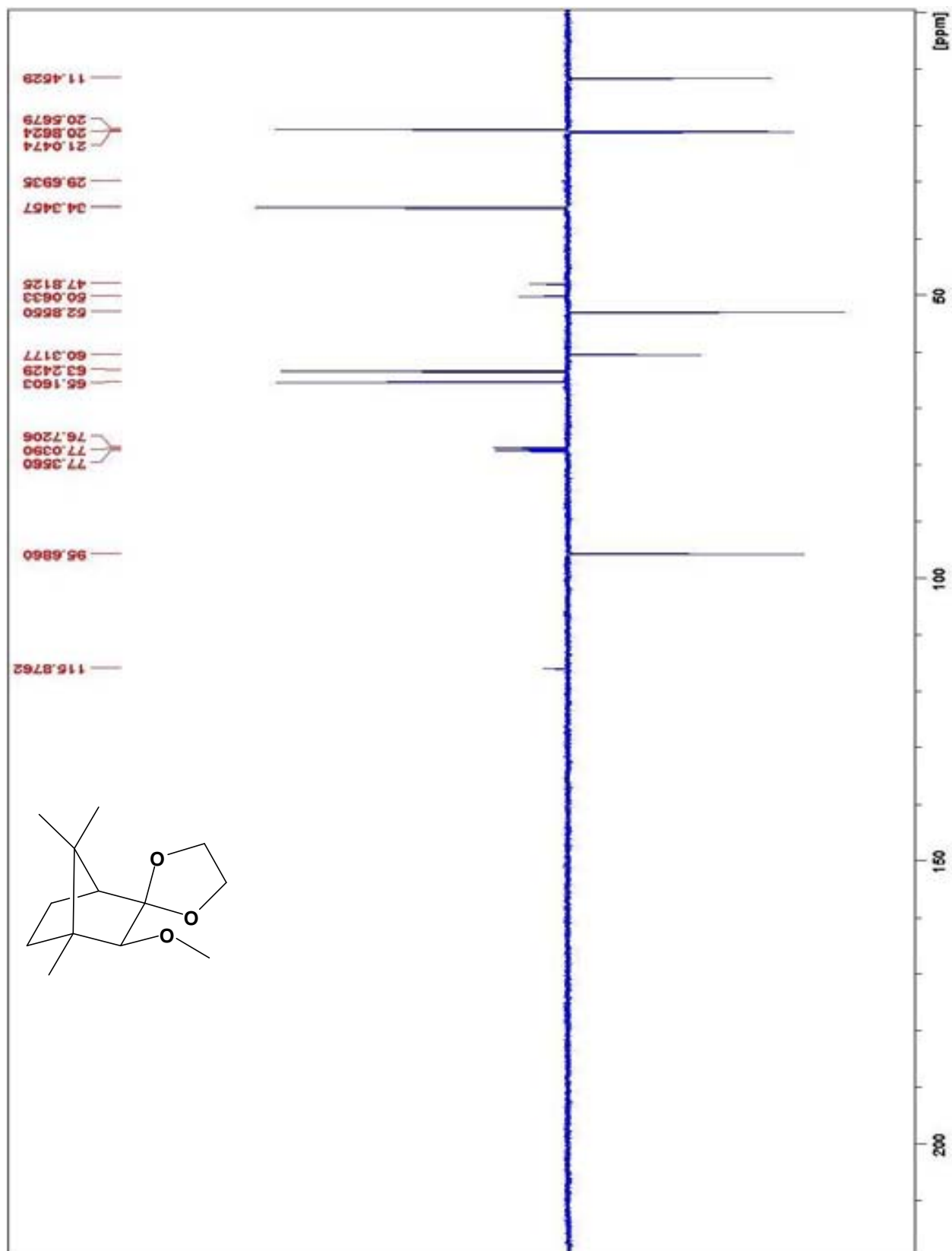
¹H NMR Spectrum (400 MHz) of Compound 12 obtained from Method B



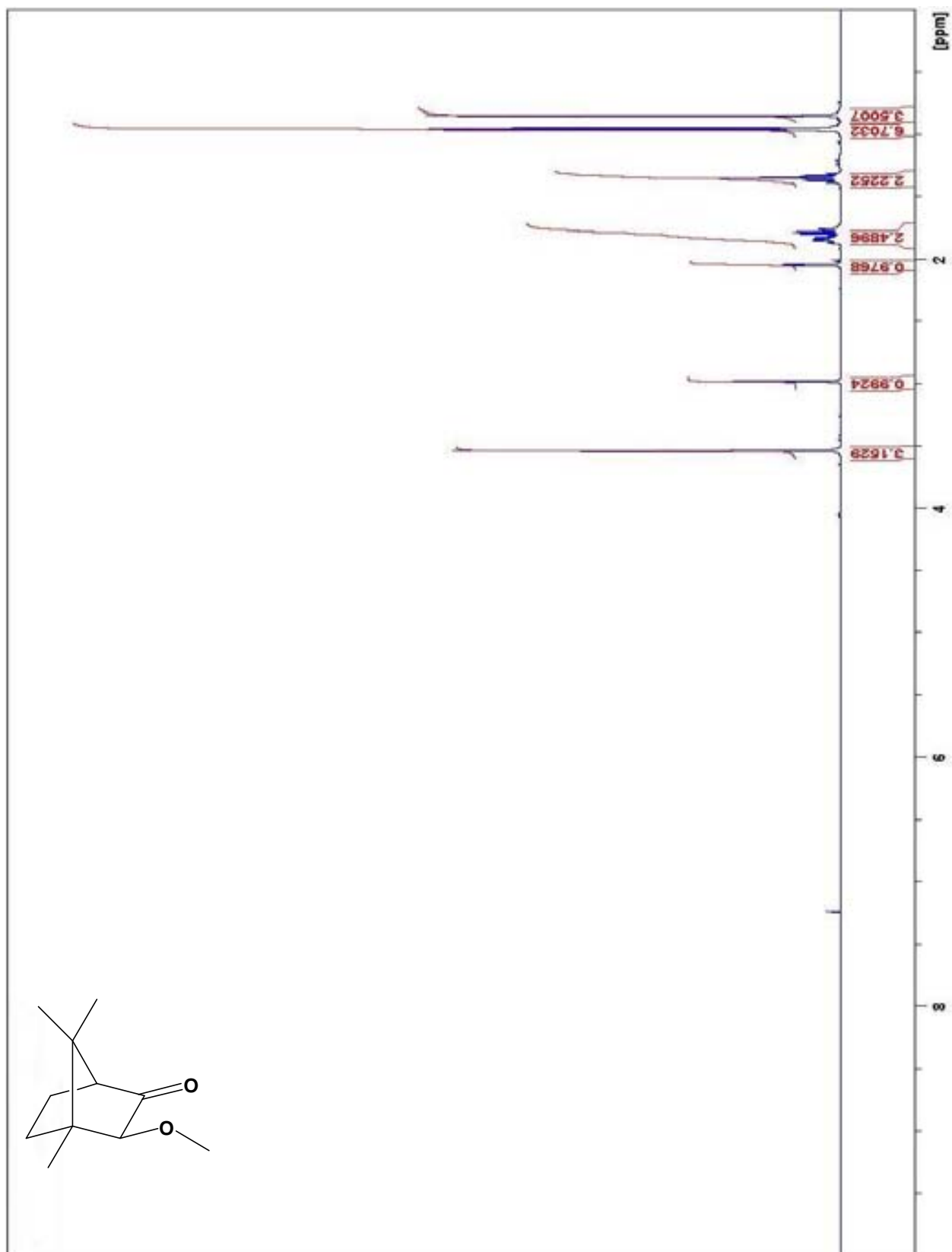
^{13}C APT NMR Spectrum (400 MHz) of Compound **12** obtained from Method B



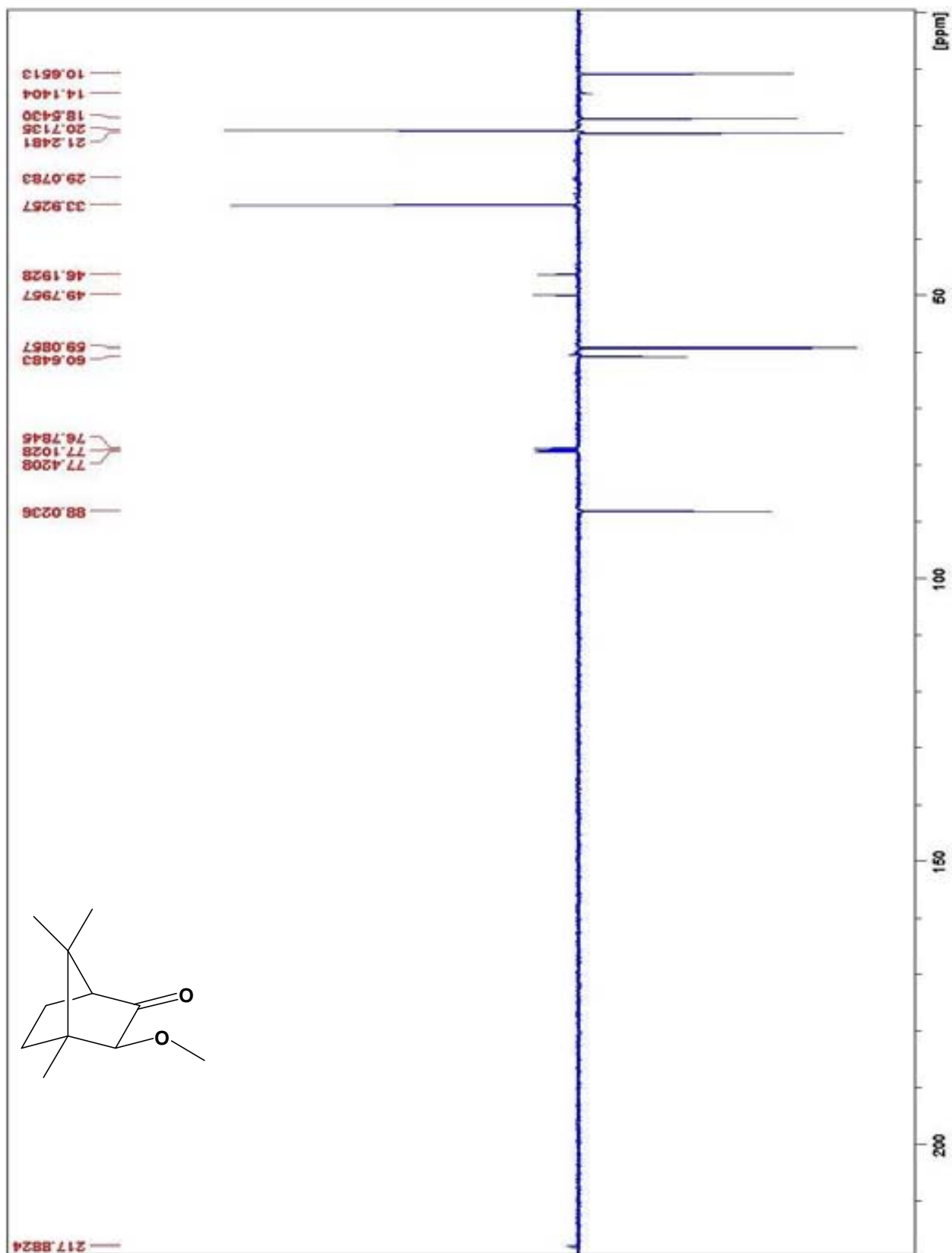
¹H NMR Spectrum (400 MHz) of Compound 16



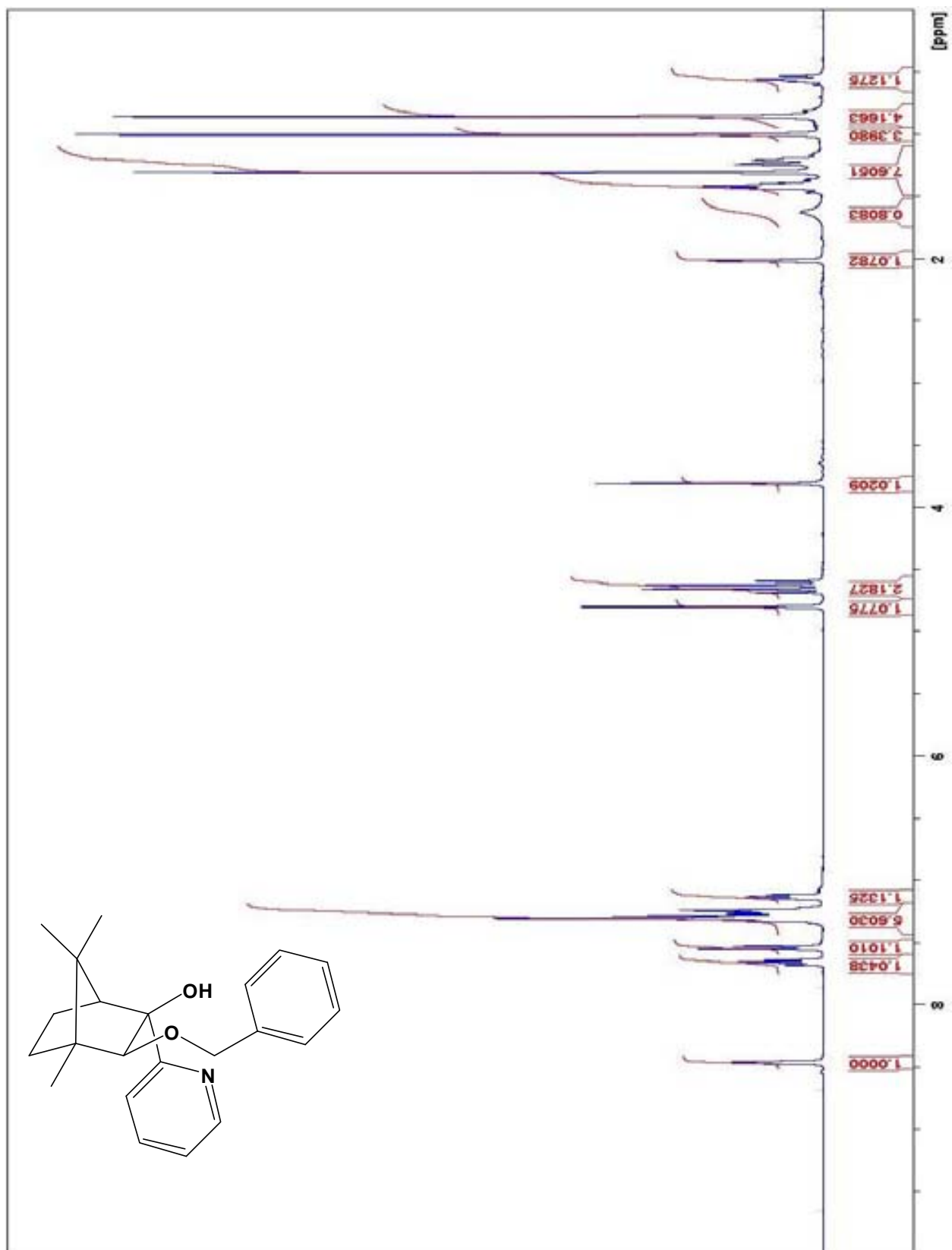
^{13}C APT NMR Spectrum (400 MHz) of Compound 16



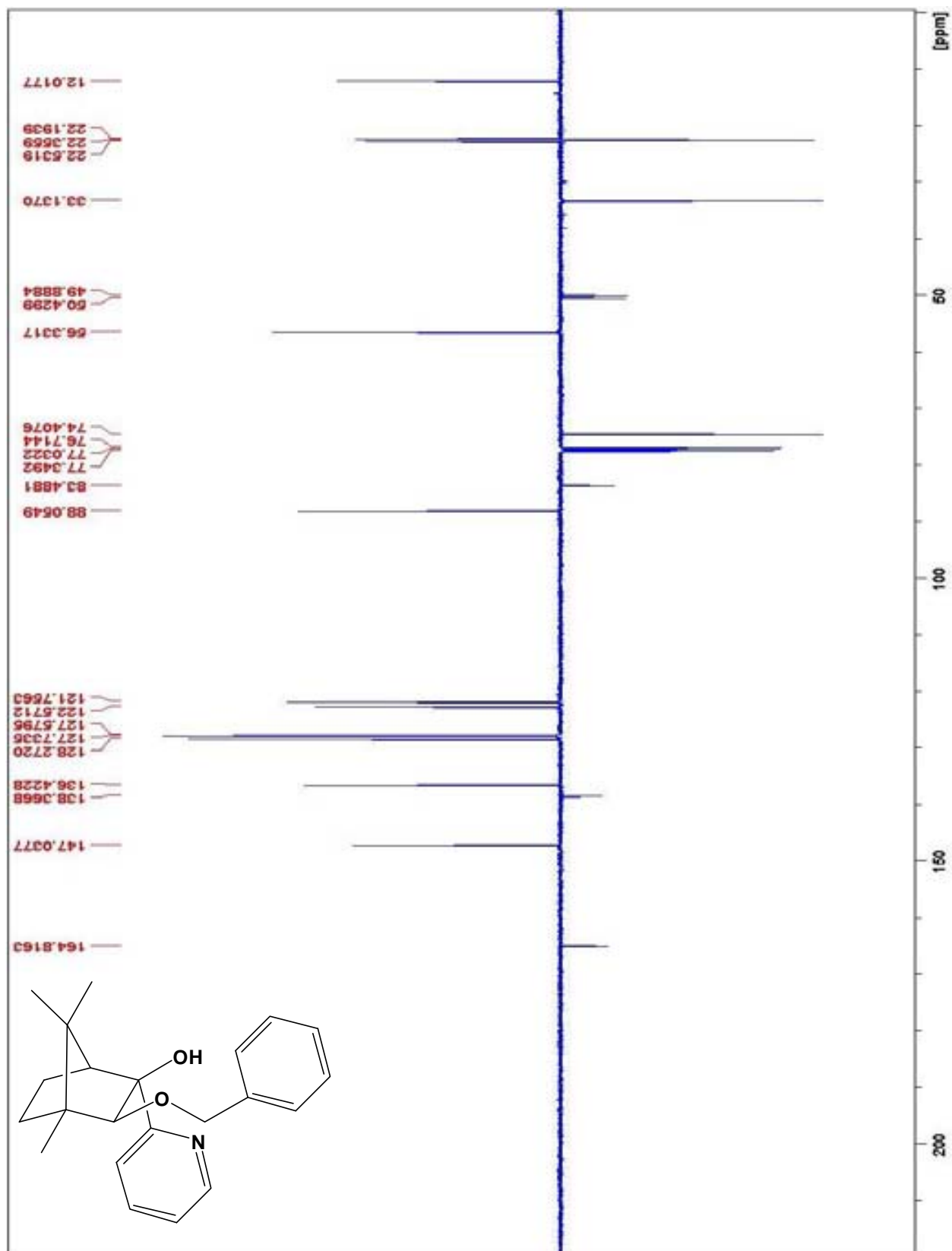
¹H NMR Spectrum (400 MHz) of Compound 17



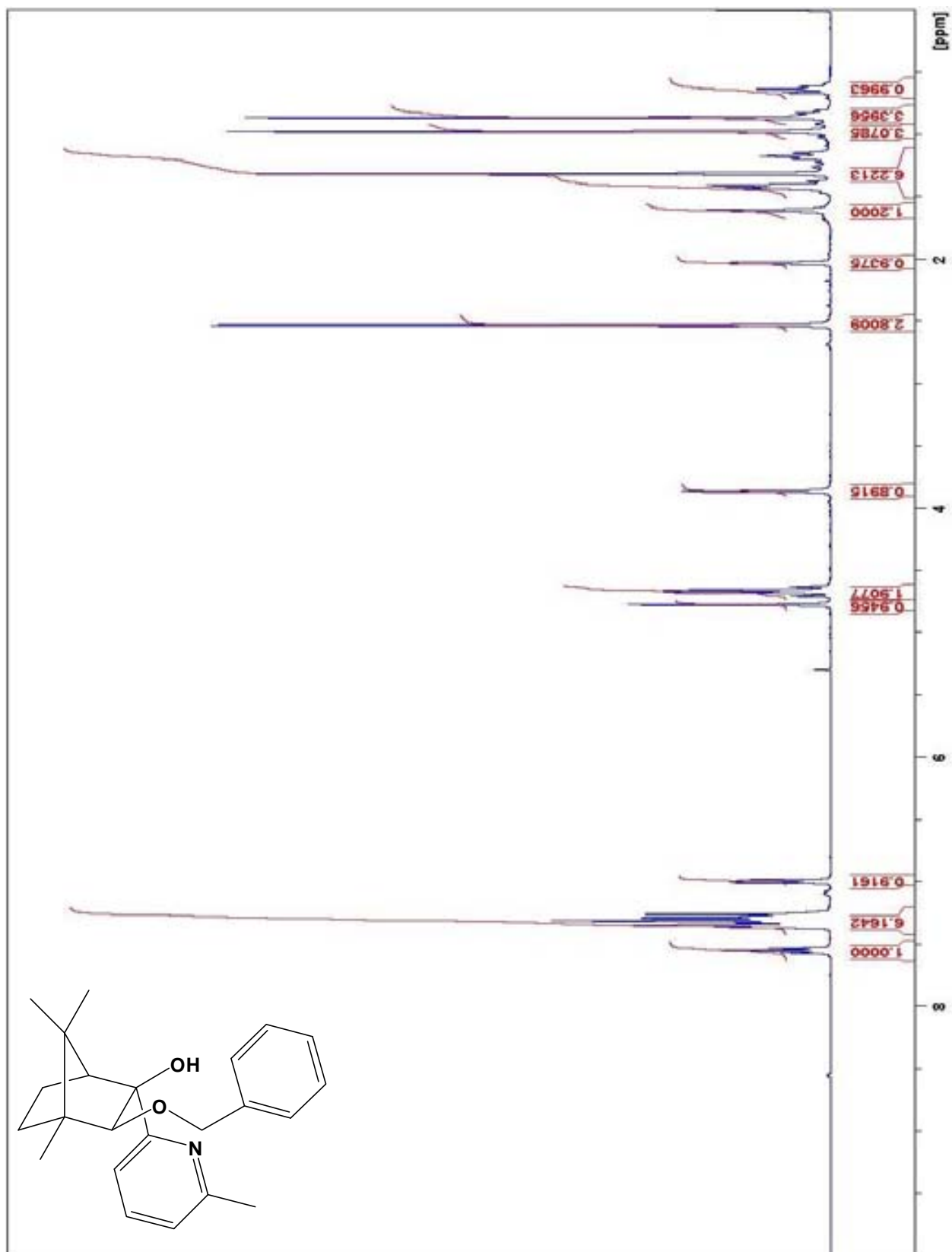
^{13}C APT NMR Spectrum (400 MHz) of Compound 17



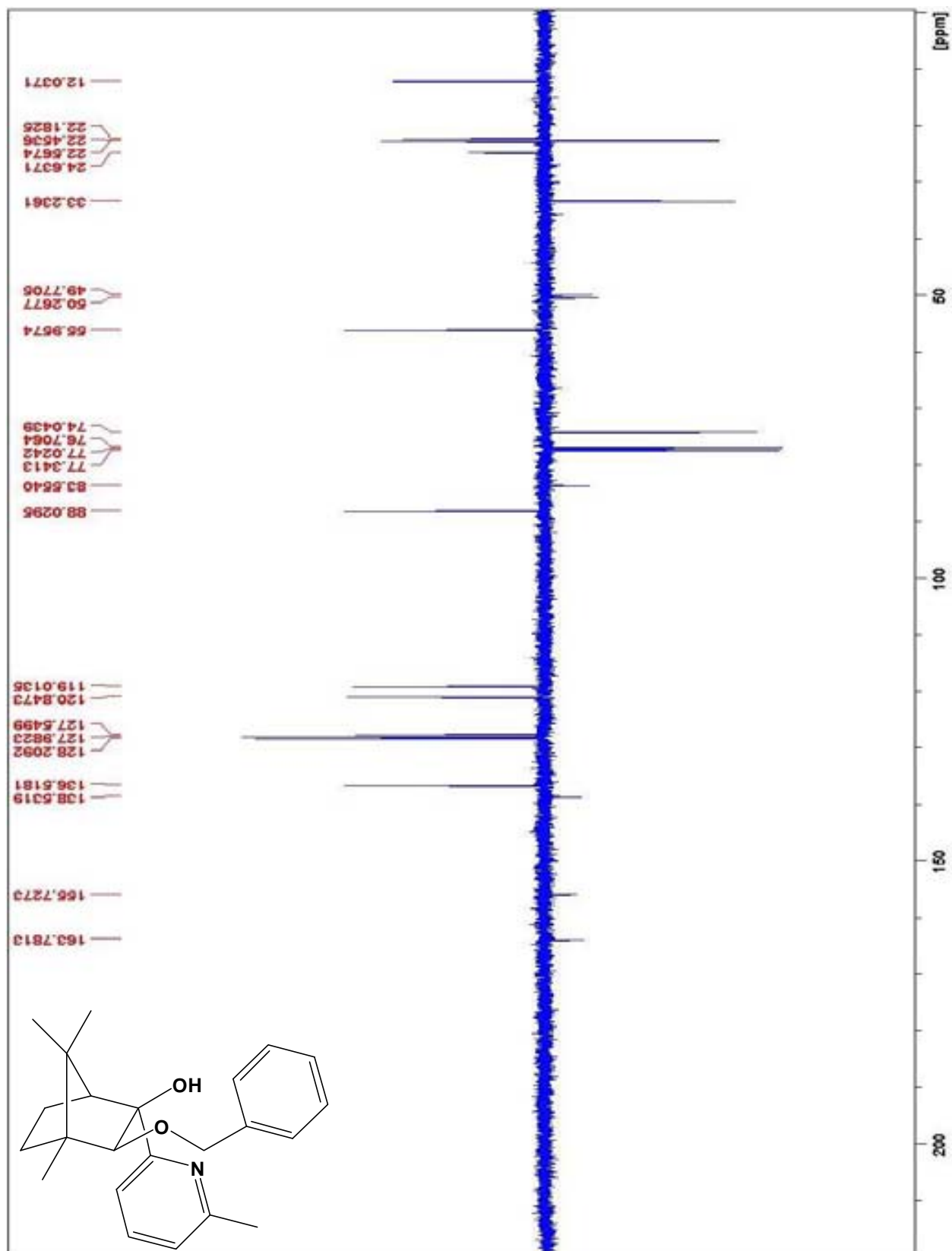
¹H NMR Spectrum (400 MHz) of Compound 3



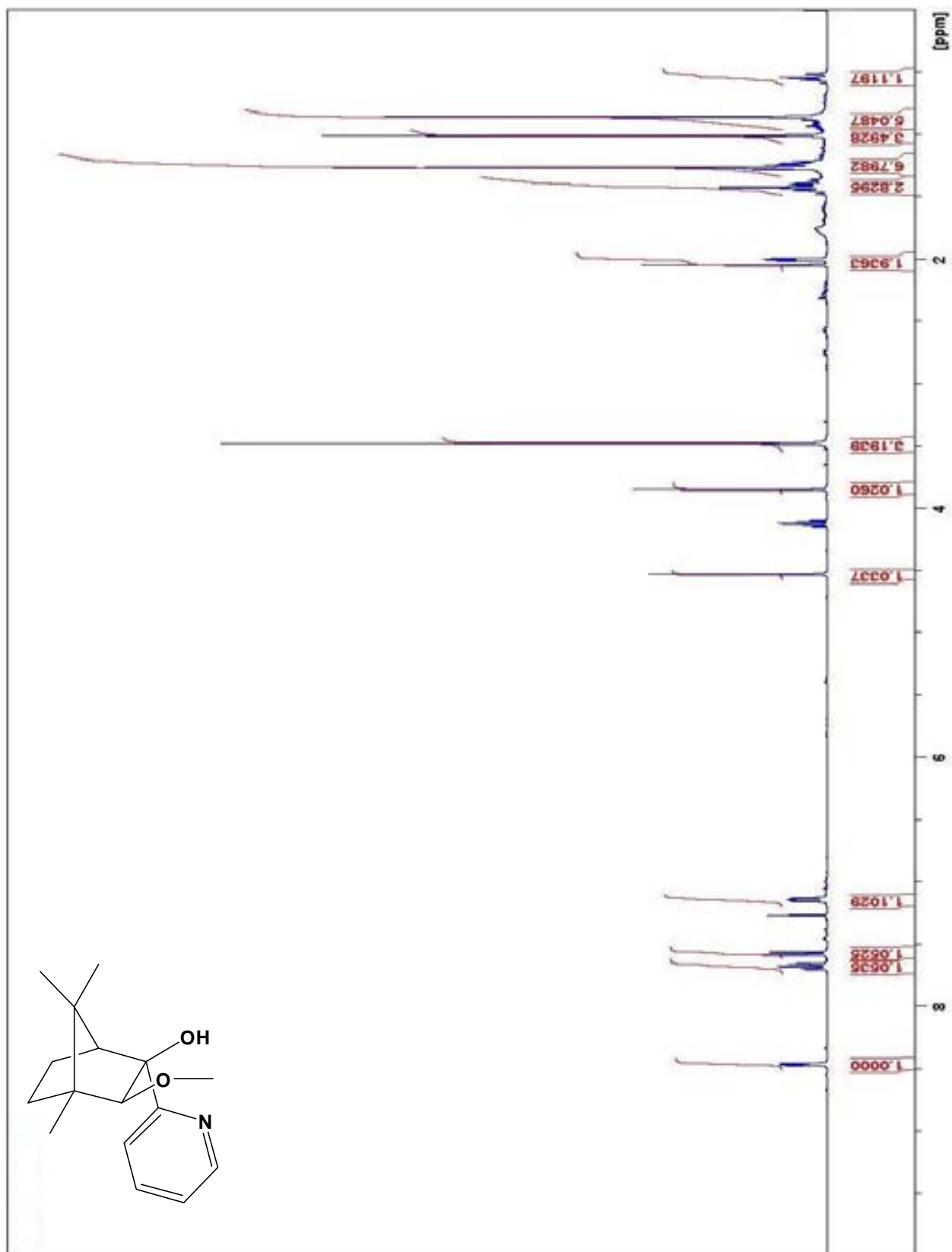
^{13}C APT NMR Spectrum (400 MHz) of Compound 3



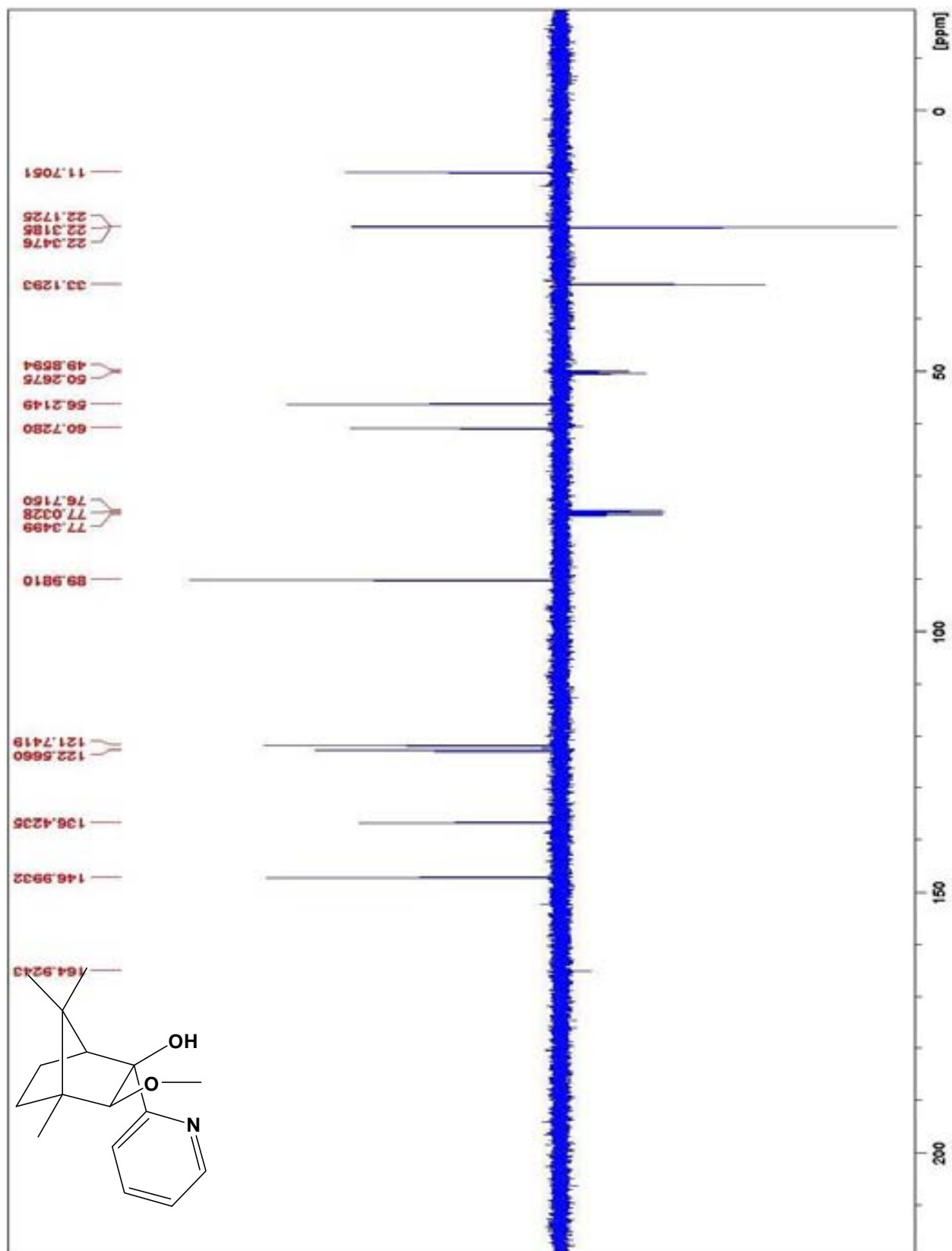
¹H NMR Spectrum (400 MHz) of Compound 4



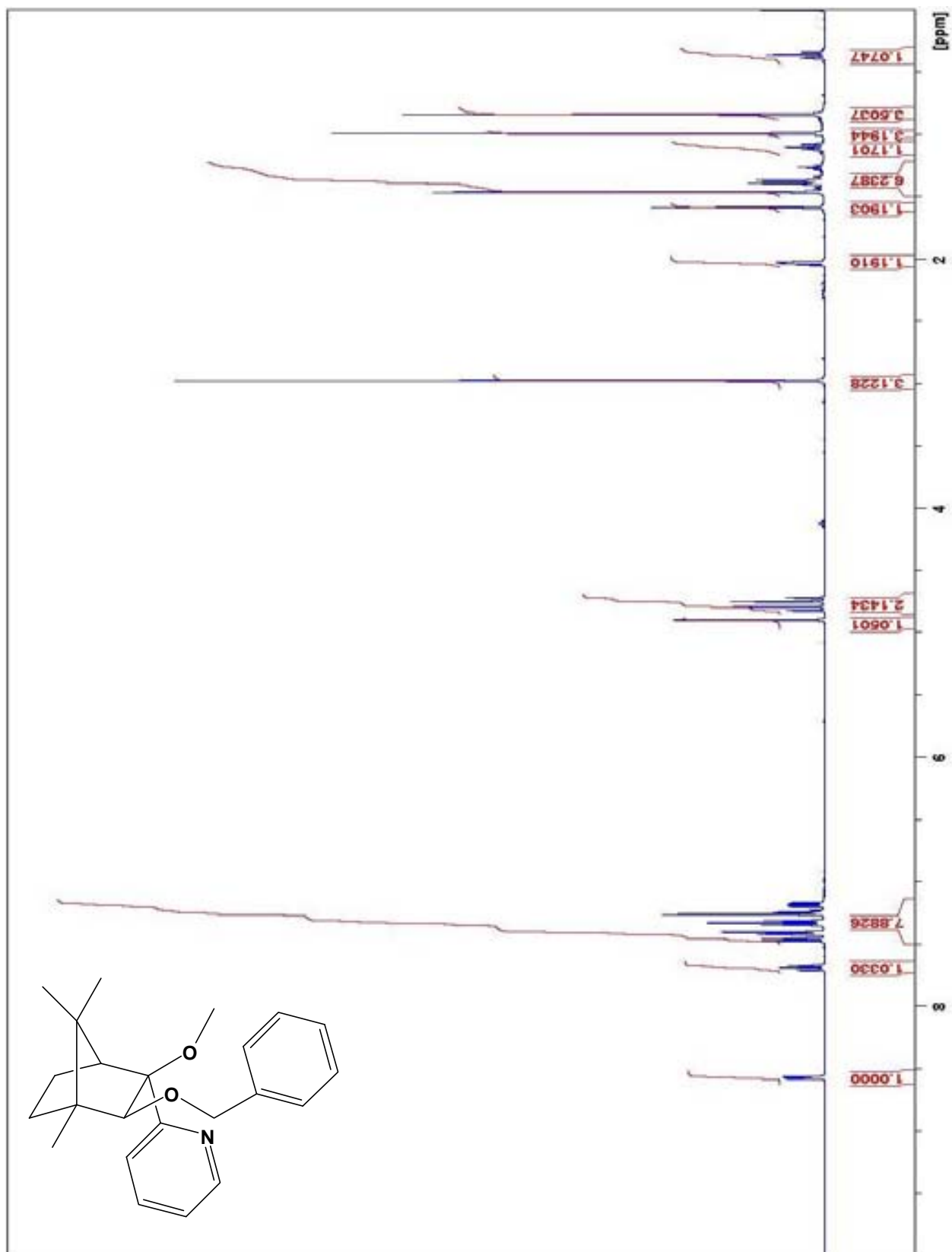
¹³C APT NMR Spectrum (400 MHz) of Compound 4



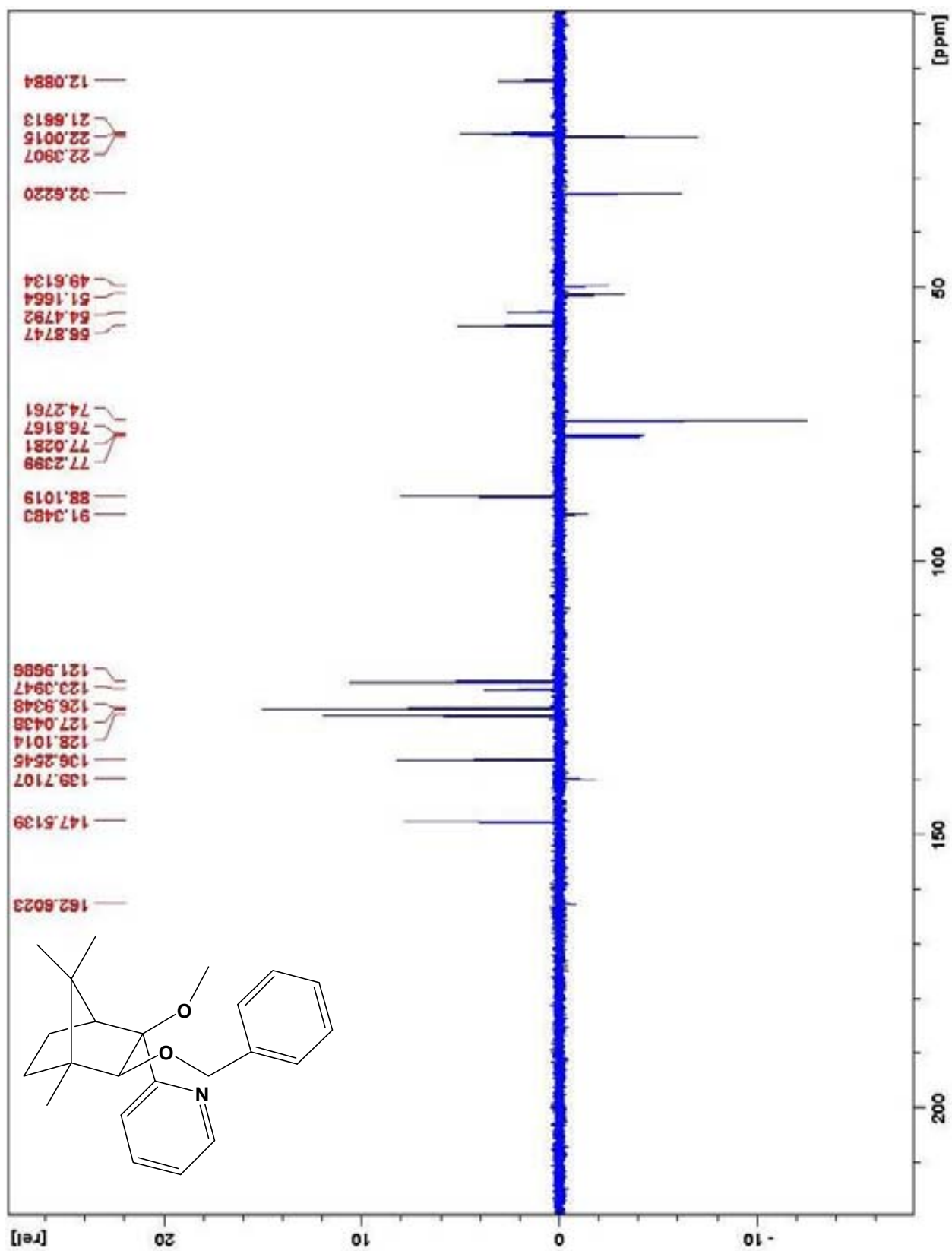
¹H NMR Spectrum (400 MHz) of Compound 5



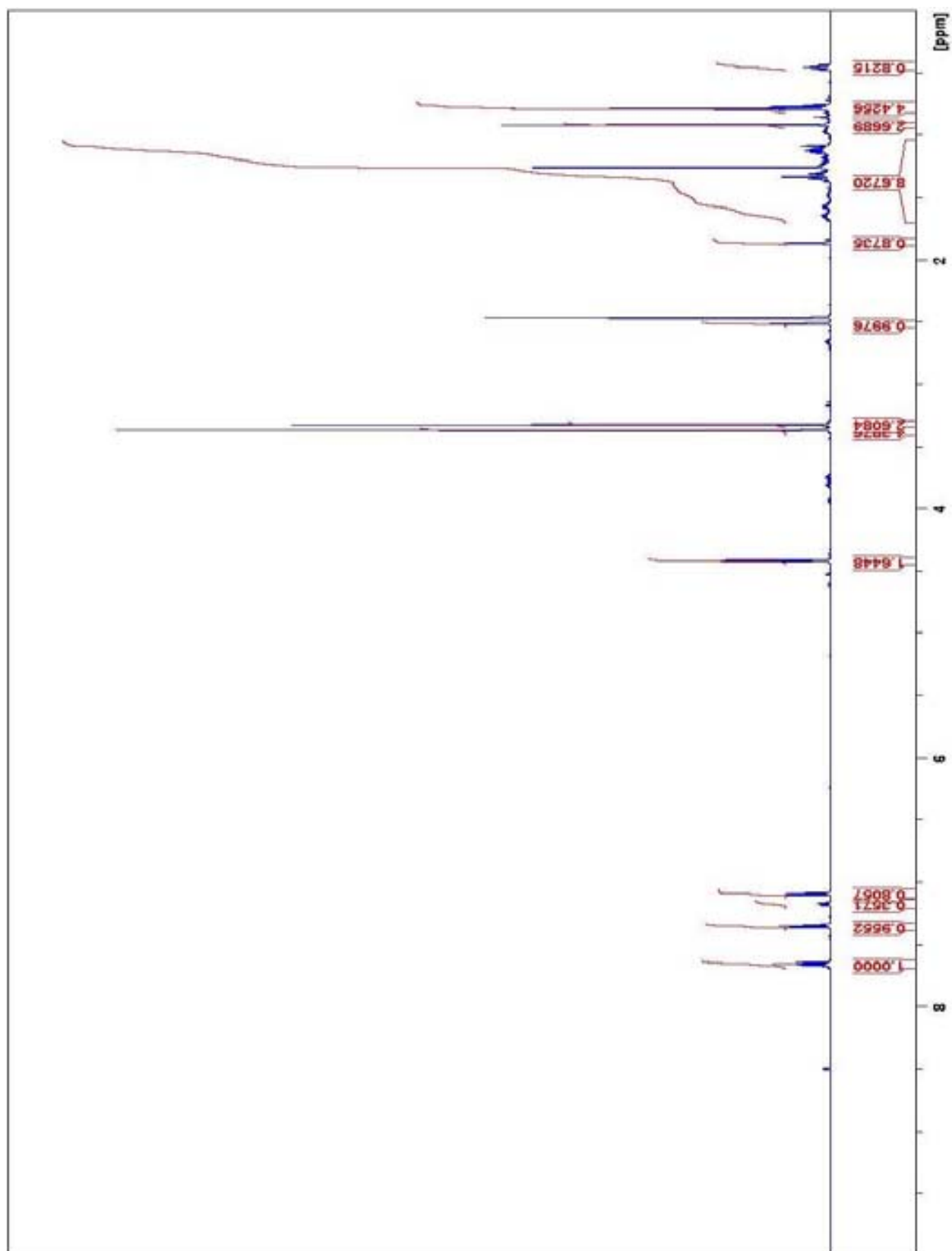
¹³C APT NMR Spectrum (400 MHz) of Compound 5



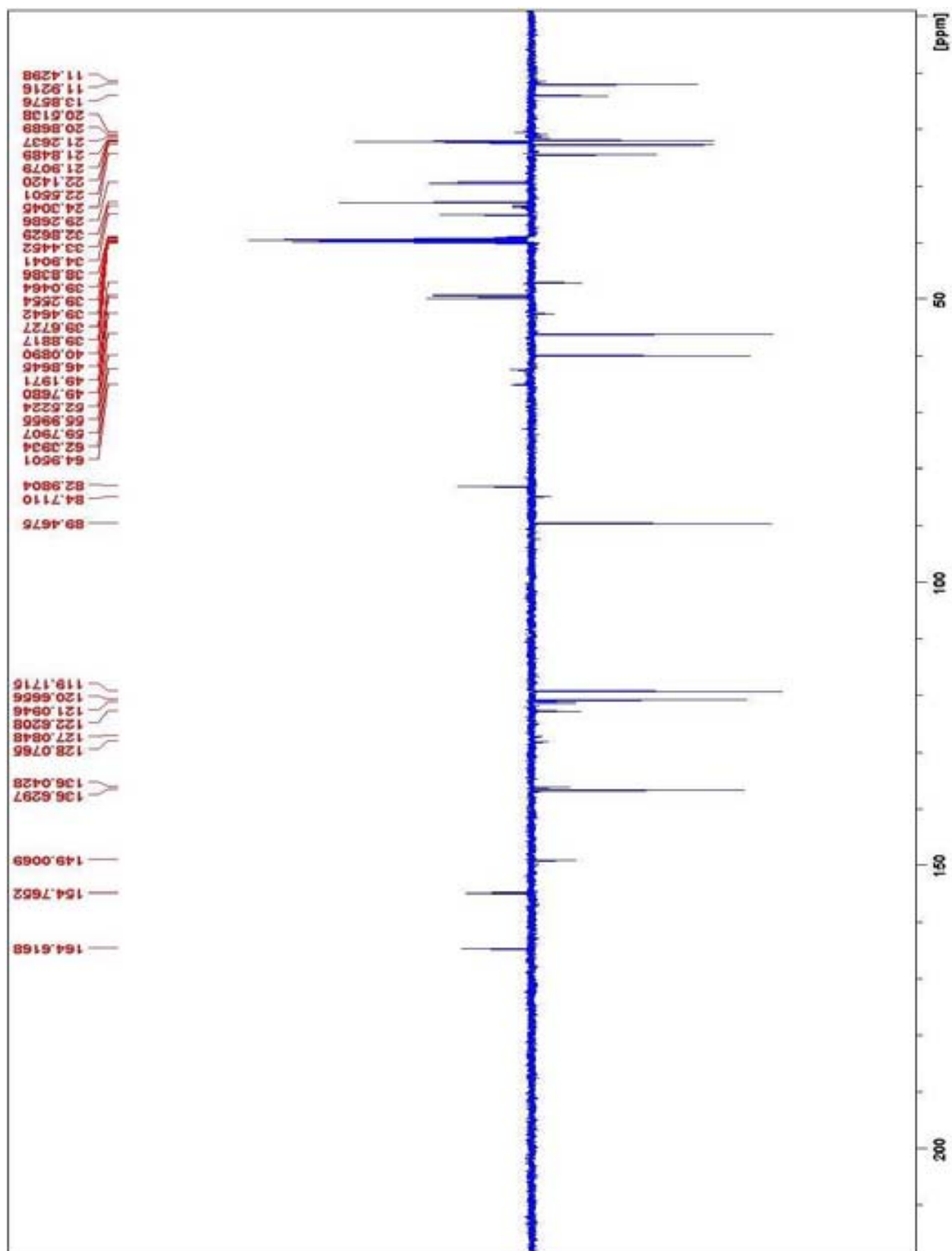
¹H NMR Spectrum (400 MHz) of Compound 6



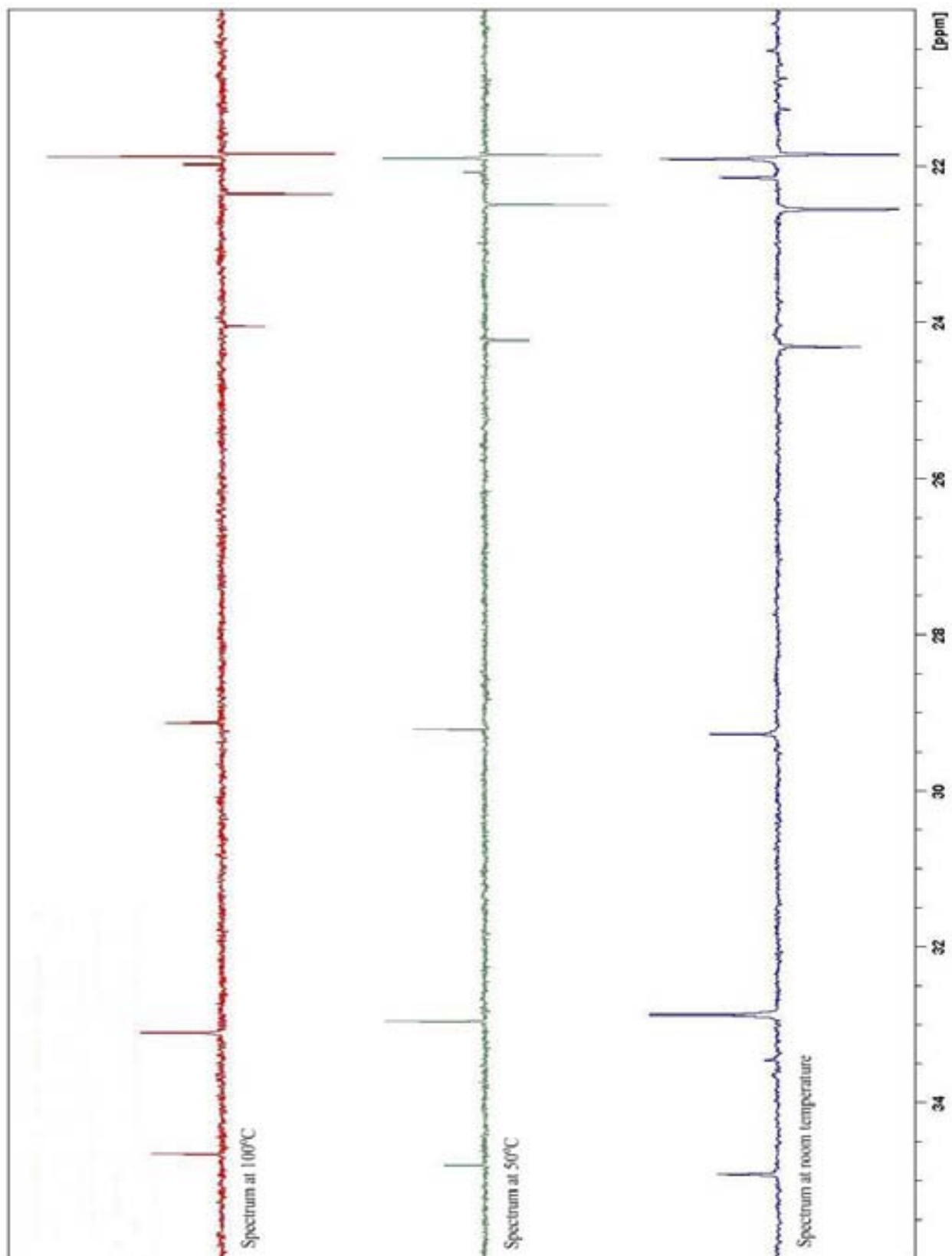
¹³C APT NMR Spectrum (400 MHz) of Compound 6



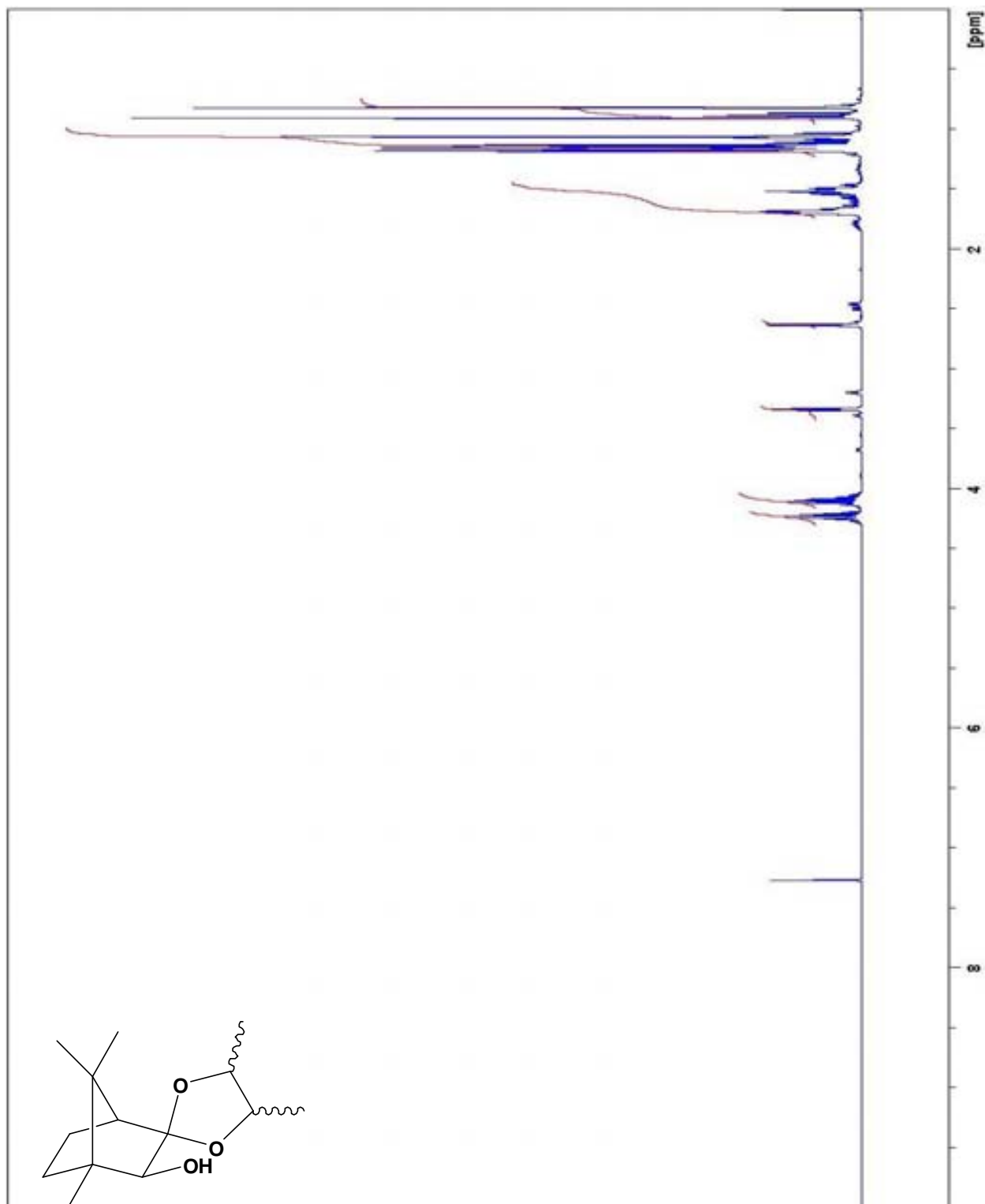
^1H NMR Spectrum (600 MHz) of Compound **18** in DMSO- D_6

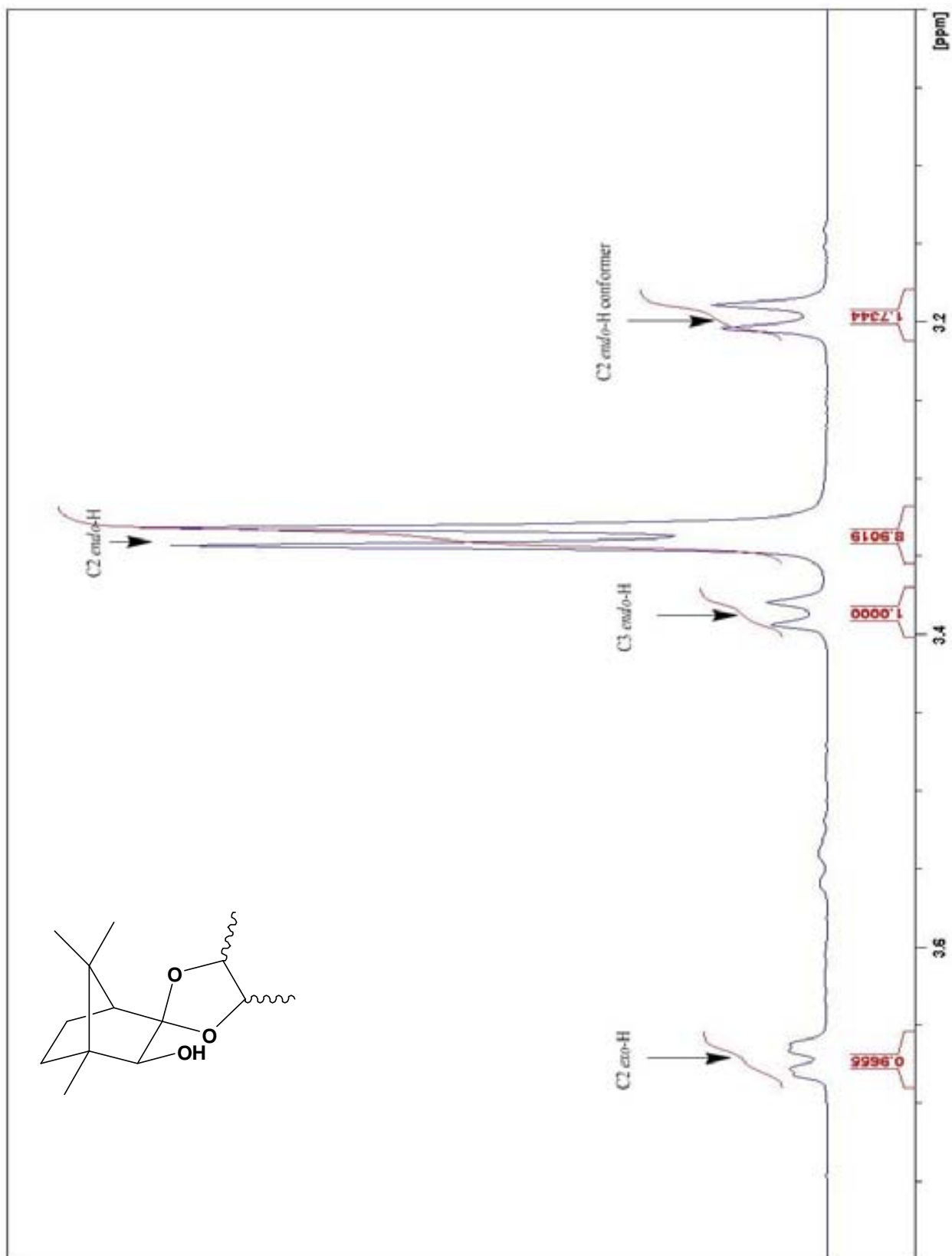


^{13}C APT NMR Spectrum (400 MHz) of Compound 18 in DMSO- D_6

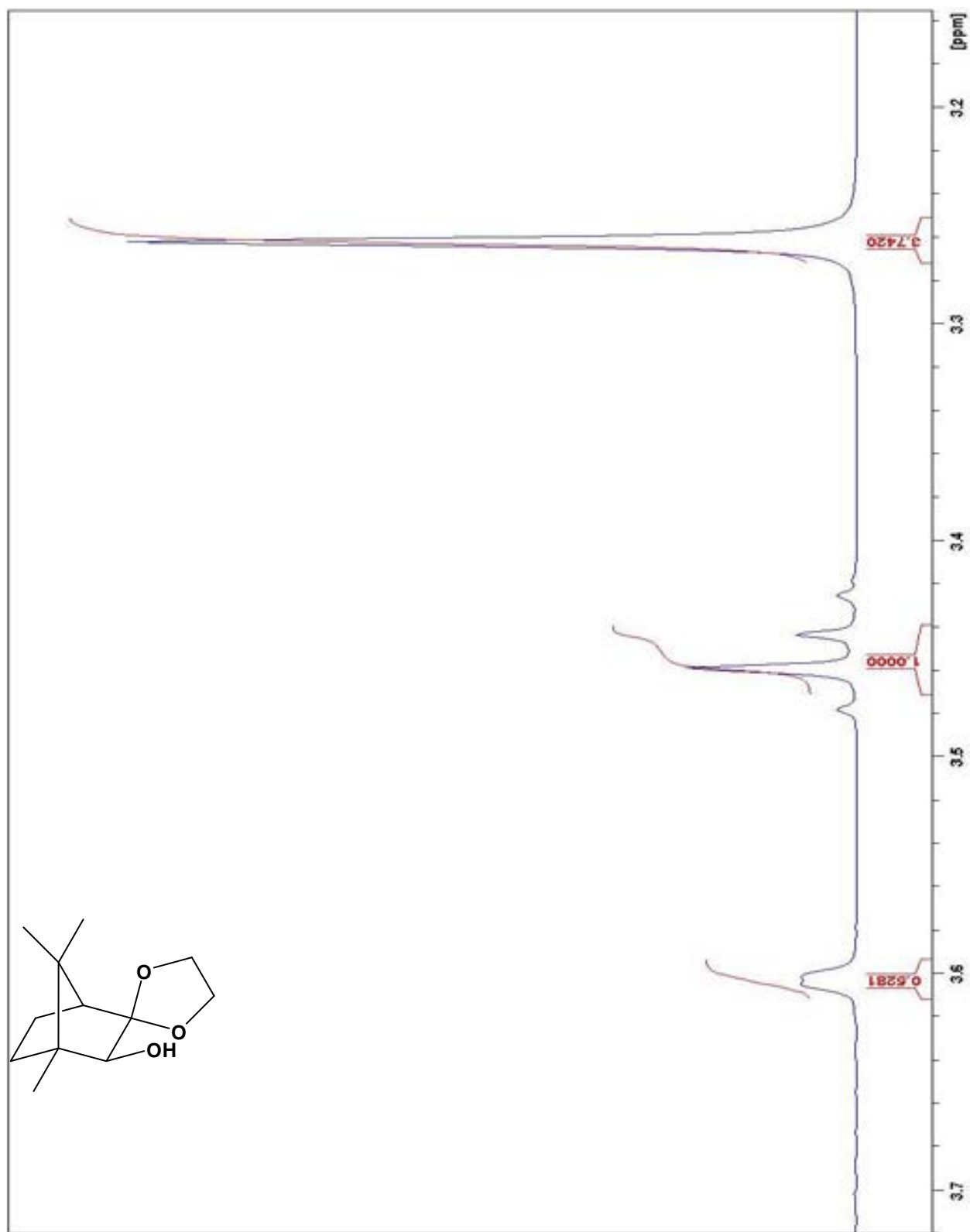


High temperature ^{13}C APT NMR Spectrum (400 MHz) of Compound **18** in $\text{DMSO-}d_6$ expanded

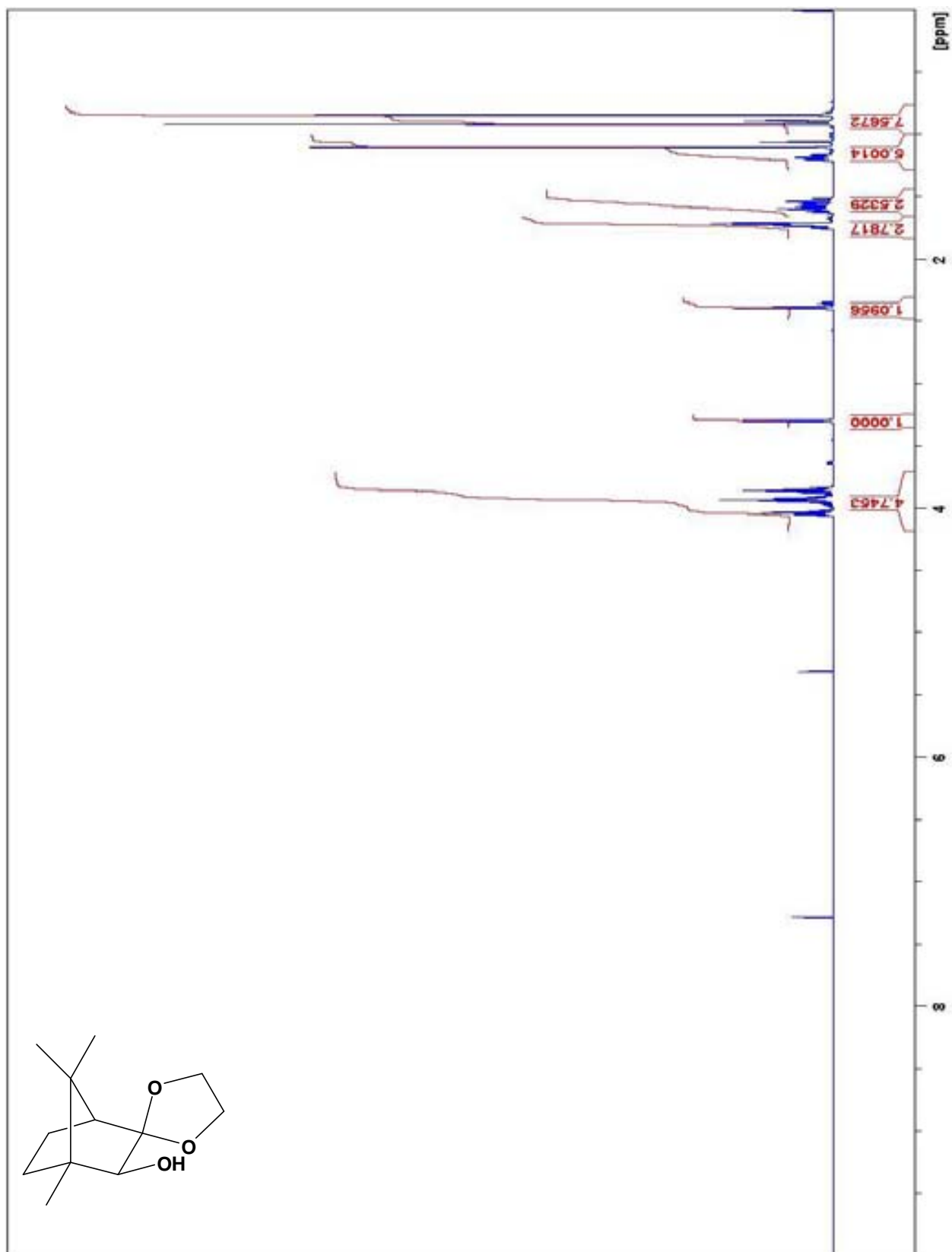
SECTION 2: DIASTEREOMERIC RATIO DETERMINATIONS ^1H NMR Spectrum (400 MHz) of Compound 10



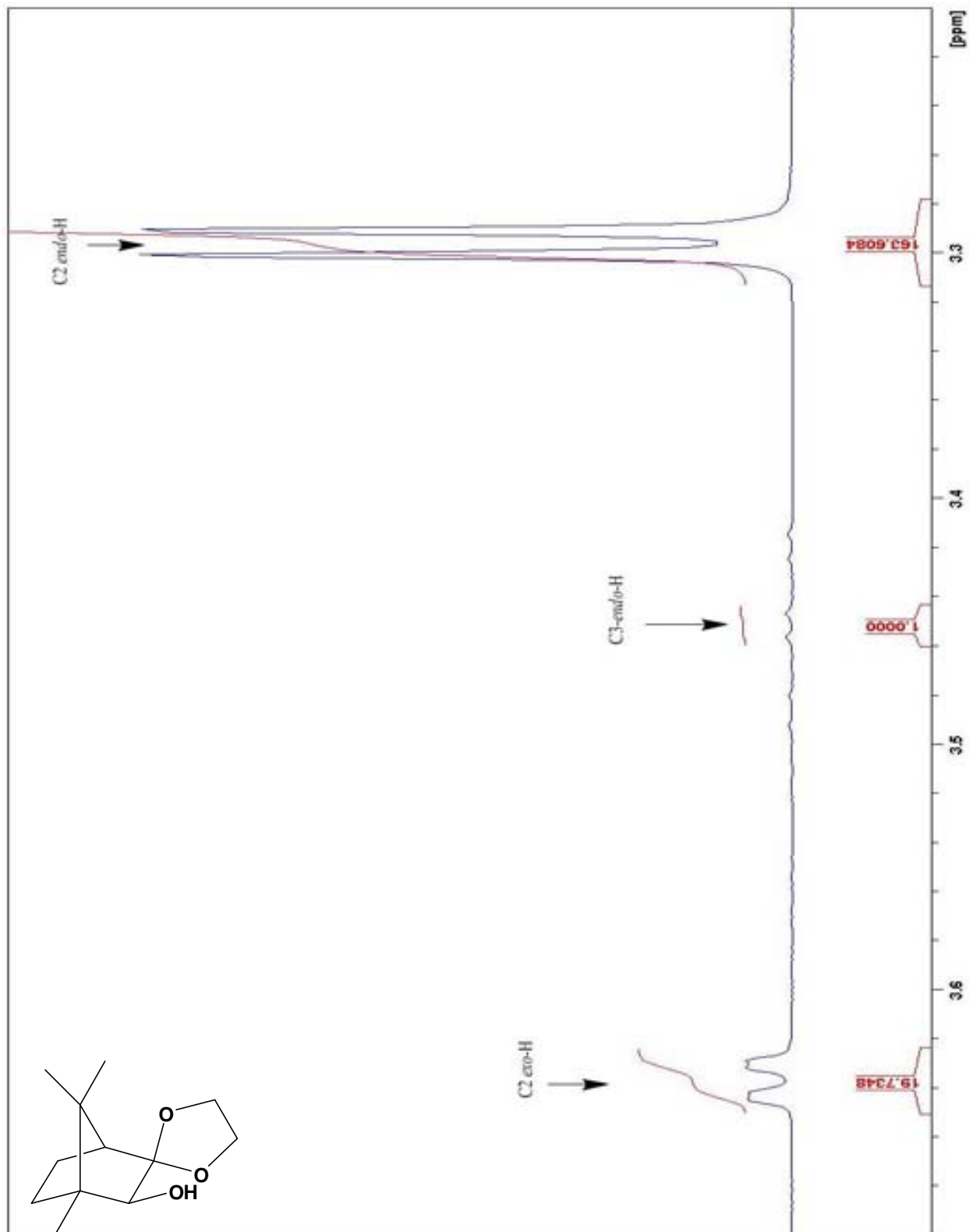
^1H NMR Spectrum (400 MHz) of crude Compound **10** expanded to show diastereomeric ratio



^1H NMR Spectrum (400 MHz) of Compound **14** before recrystallisation of preceding compound **13**(1:3 ratio)

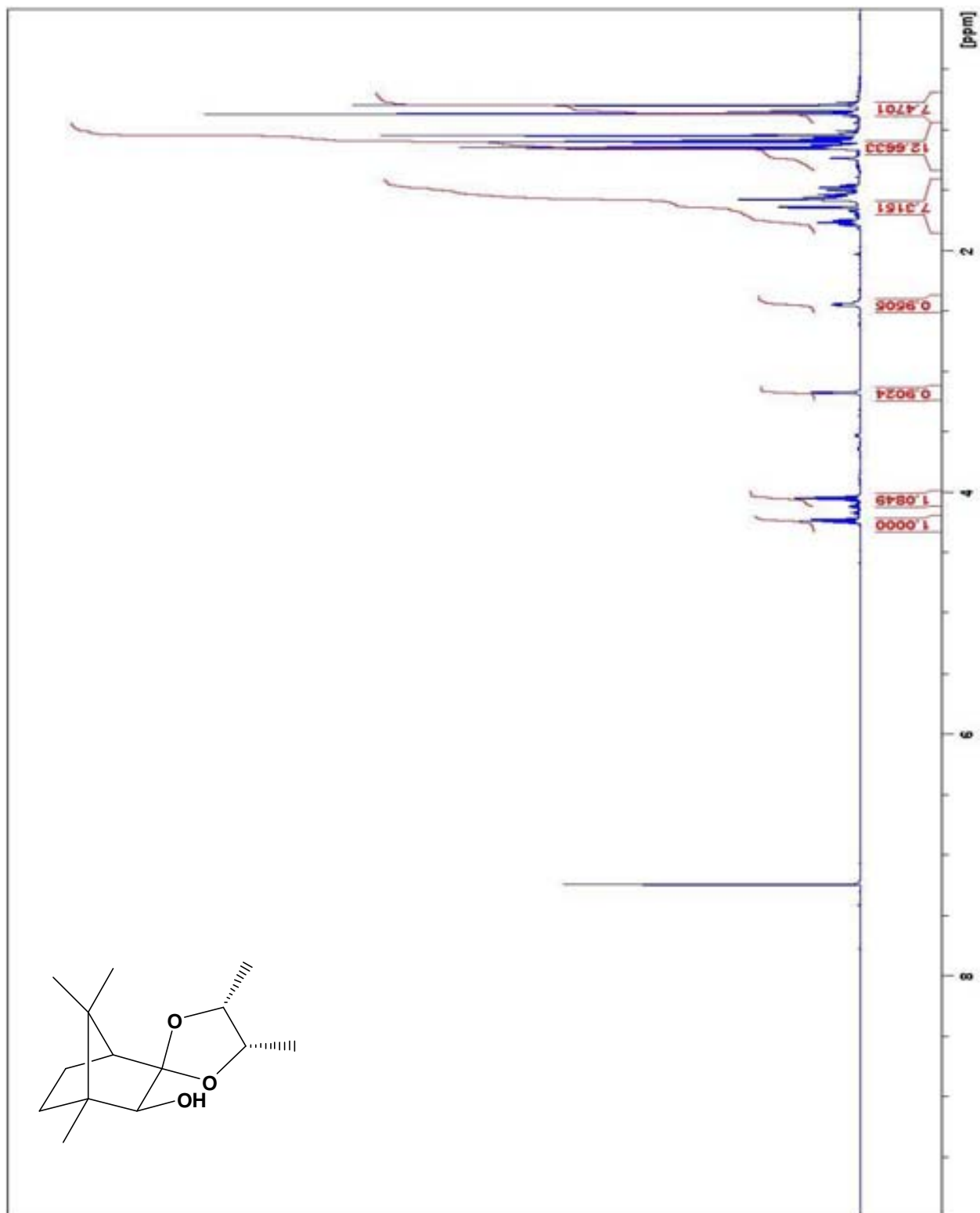


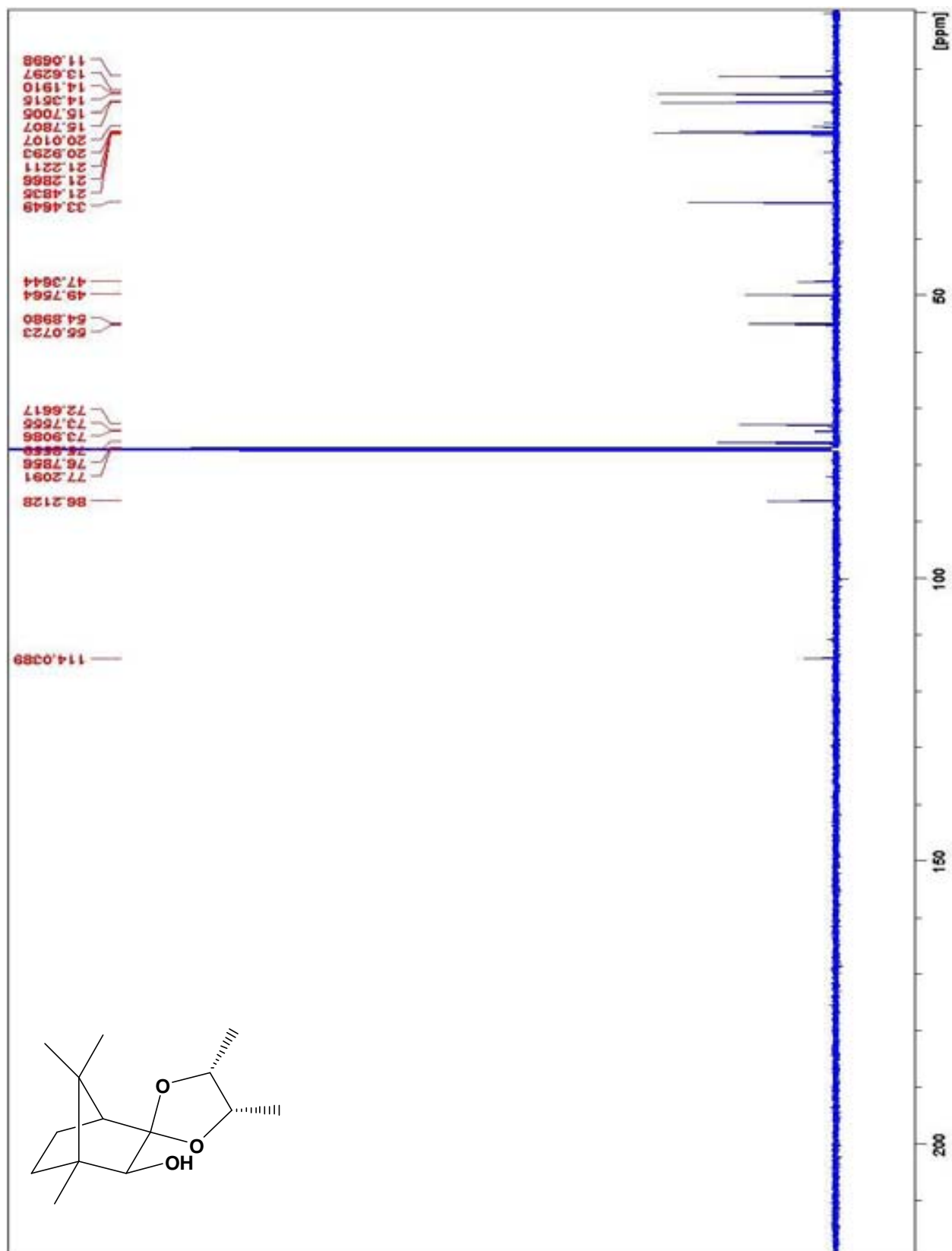
¹H NMR Spectrum (600 MHz) of Compound **14** after recrystallisation of preceding compound **13**



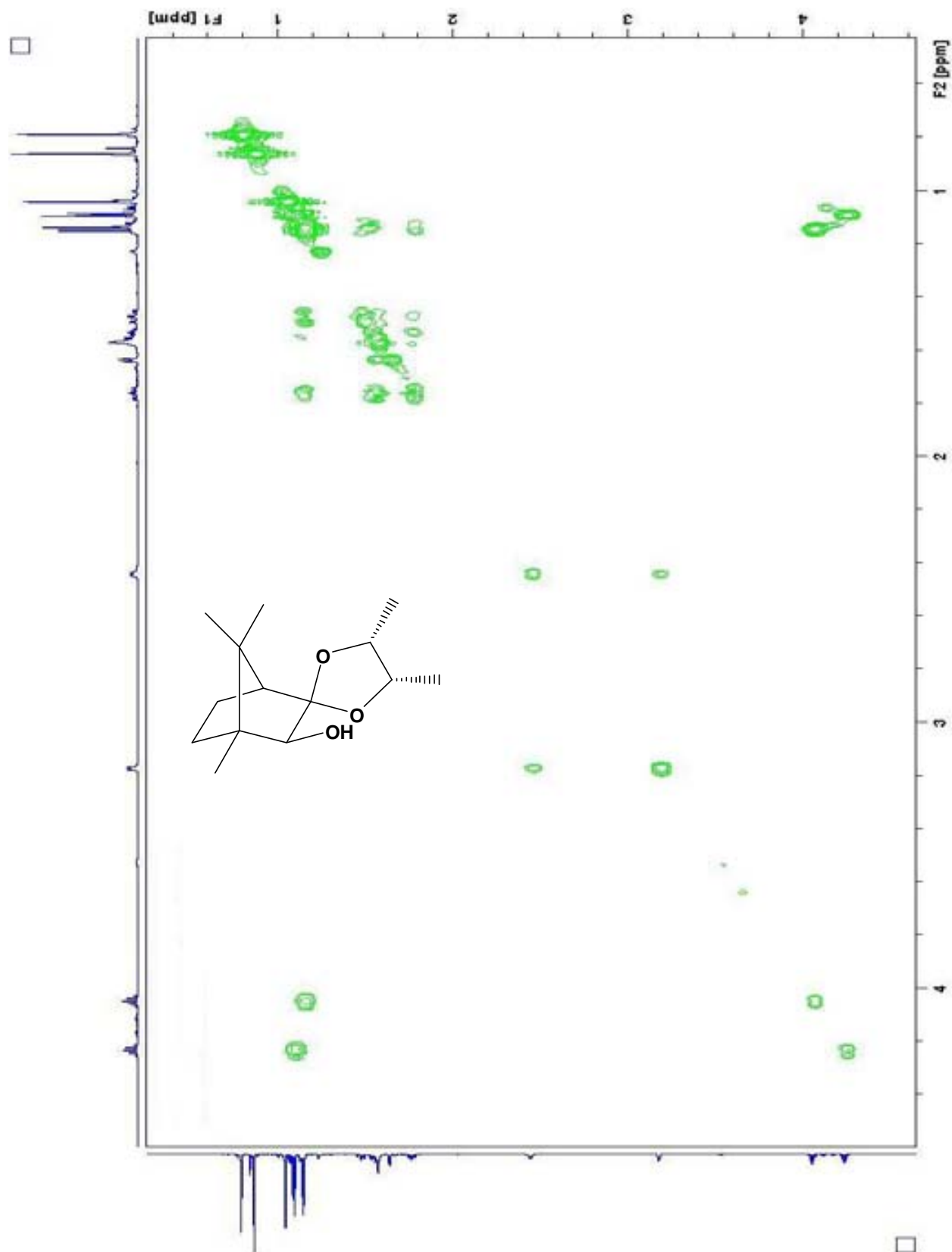
¹H NMR Spectrum (600 MHz) of Compound **14** (expanded) showing diastereomeric ratio after recrystallisation of preceding compound **13**

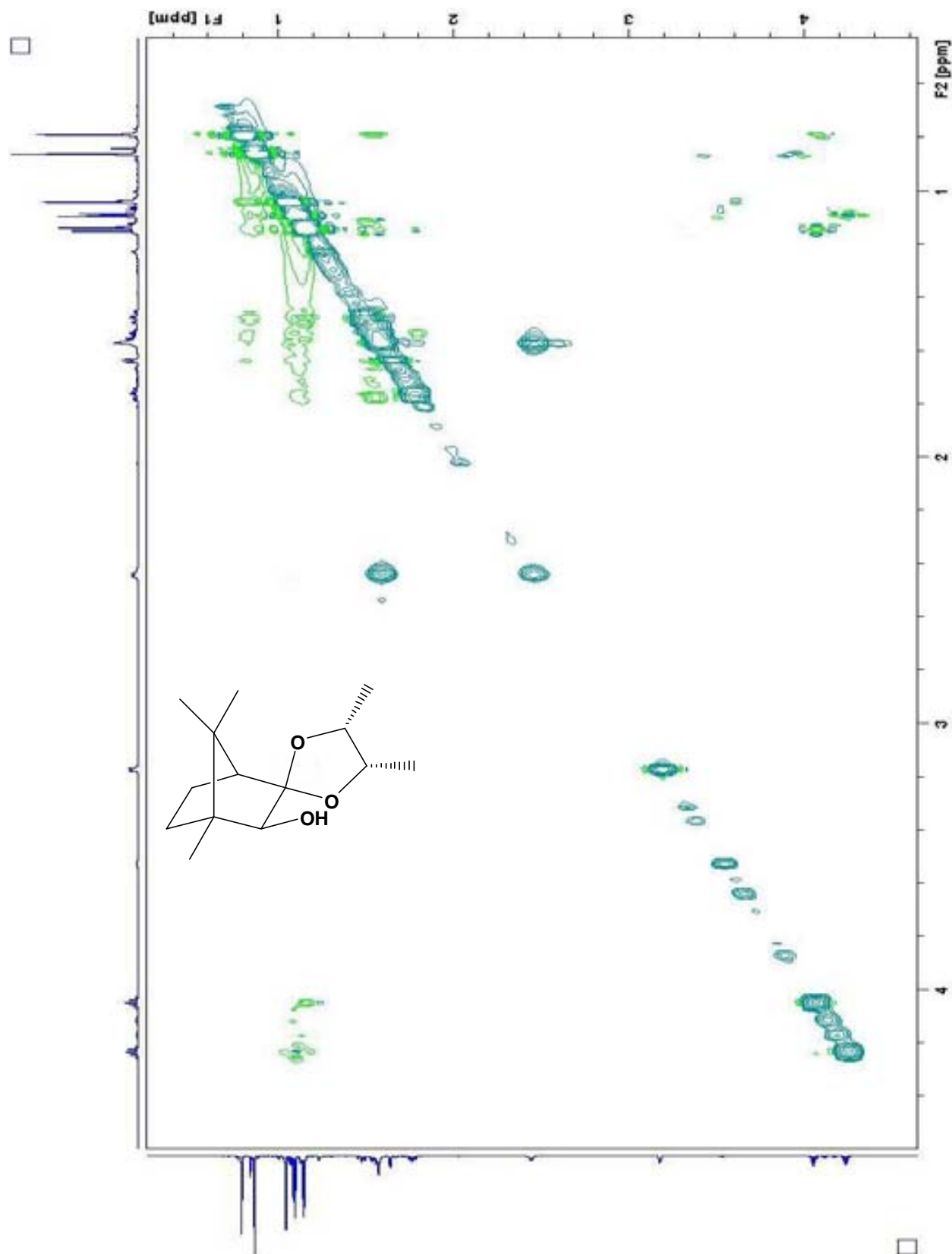
2D NMR Spectra

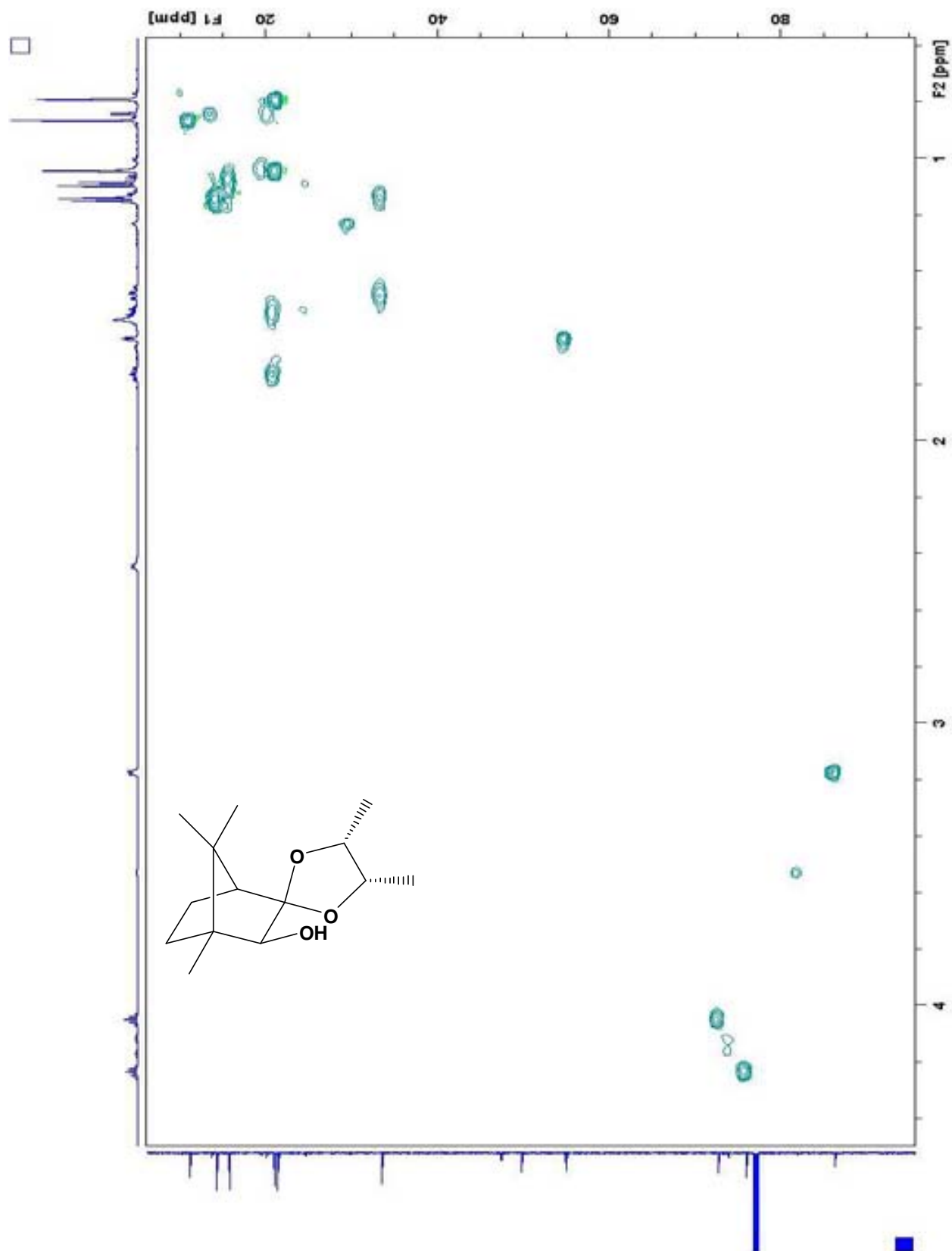
¹H NMR Spectrum (600 MHz) of Compound 10a-3



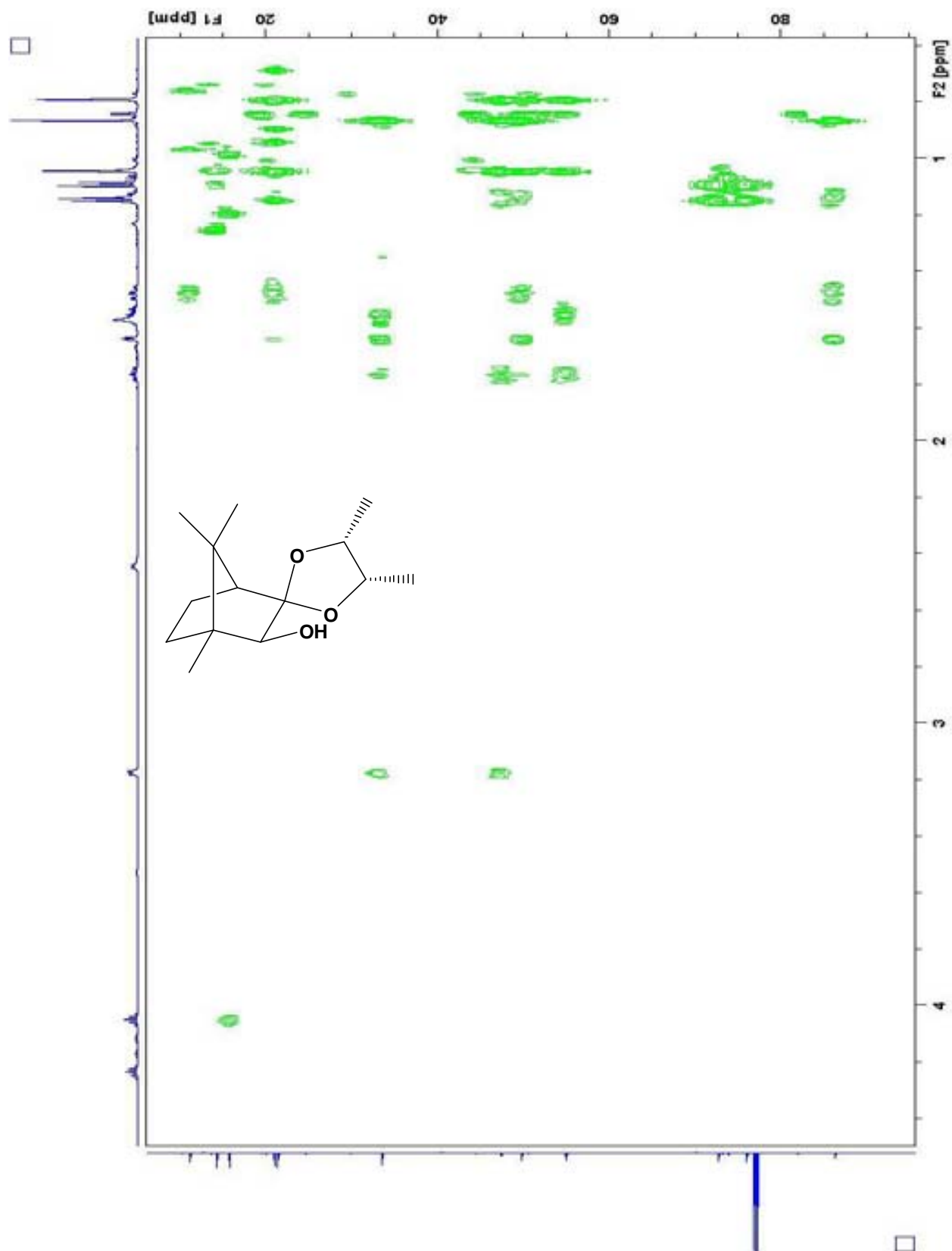
^{13}C NMR Spectrum (600 MHz) of Compound 10a-3

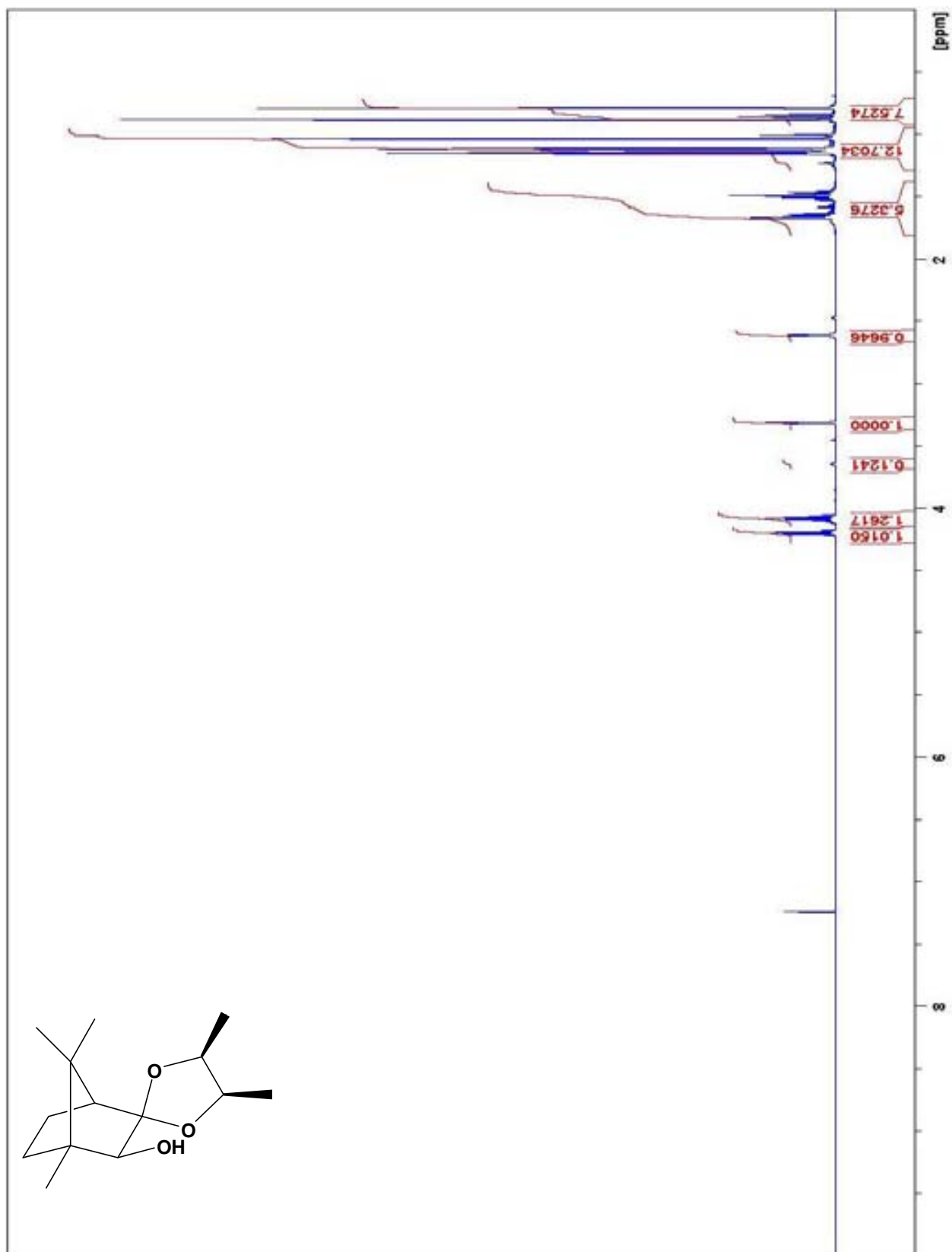
COSY Spectrum (600MHz) of Compound **10a-3**

NOESY Spectrum (600MHz) of Compound **10a-3**

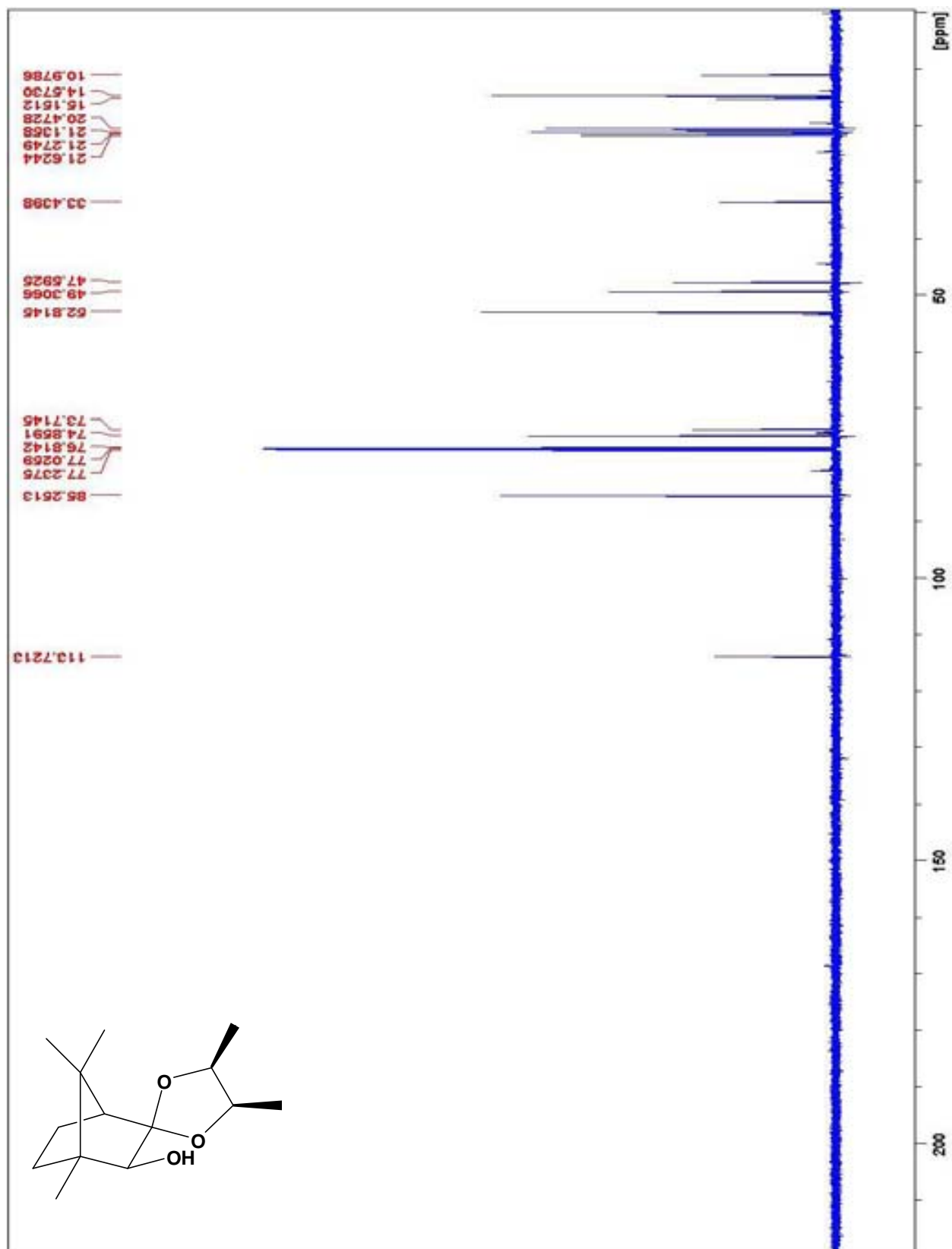


HSQC Spectrum (600MHz) of Compound 10a-3

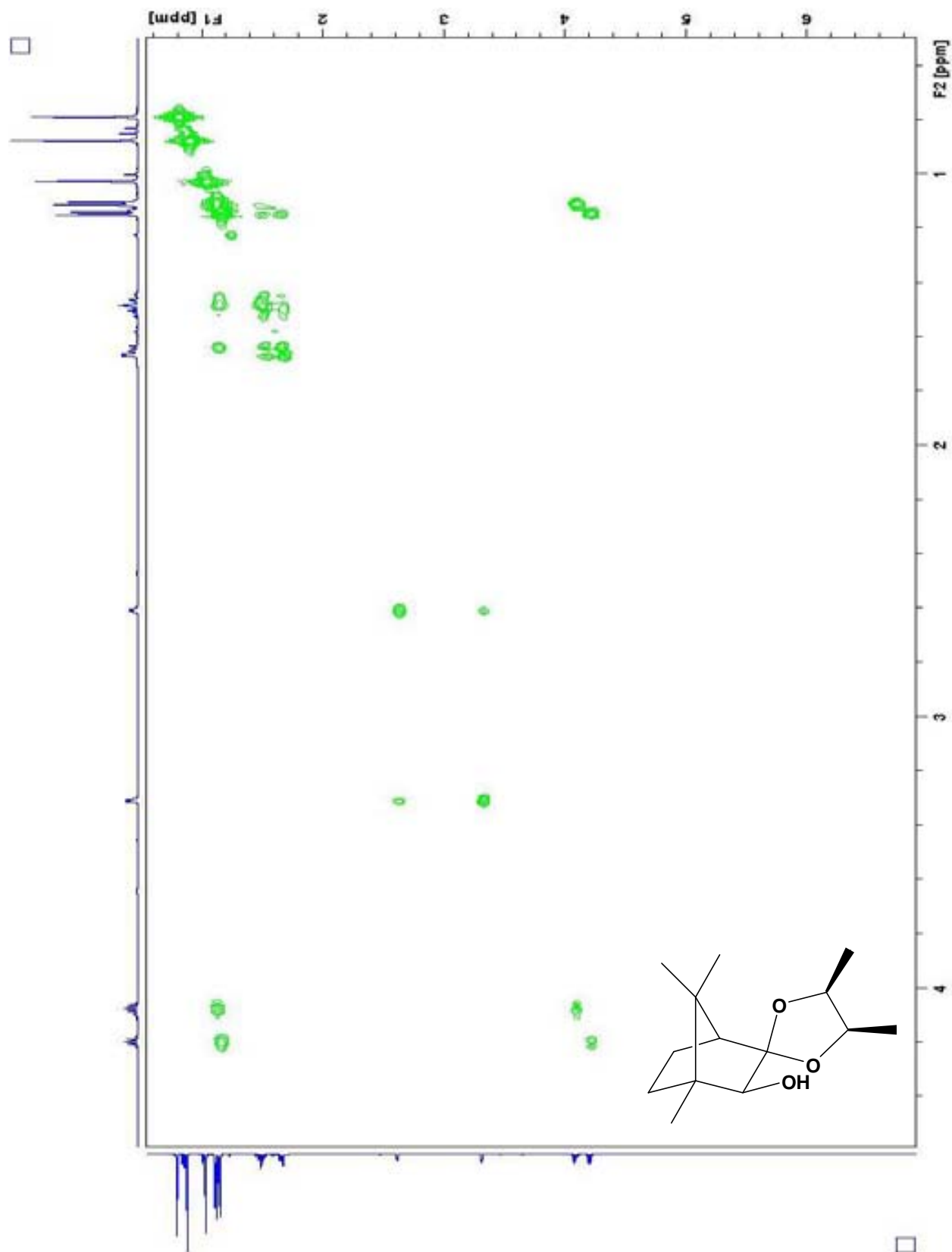
HMBC Spectrum (600MHz) of Compound **10a-3**

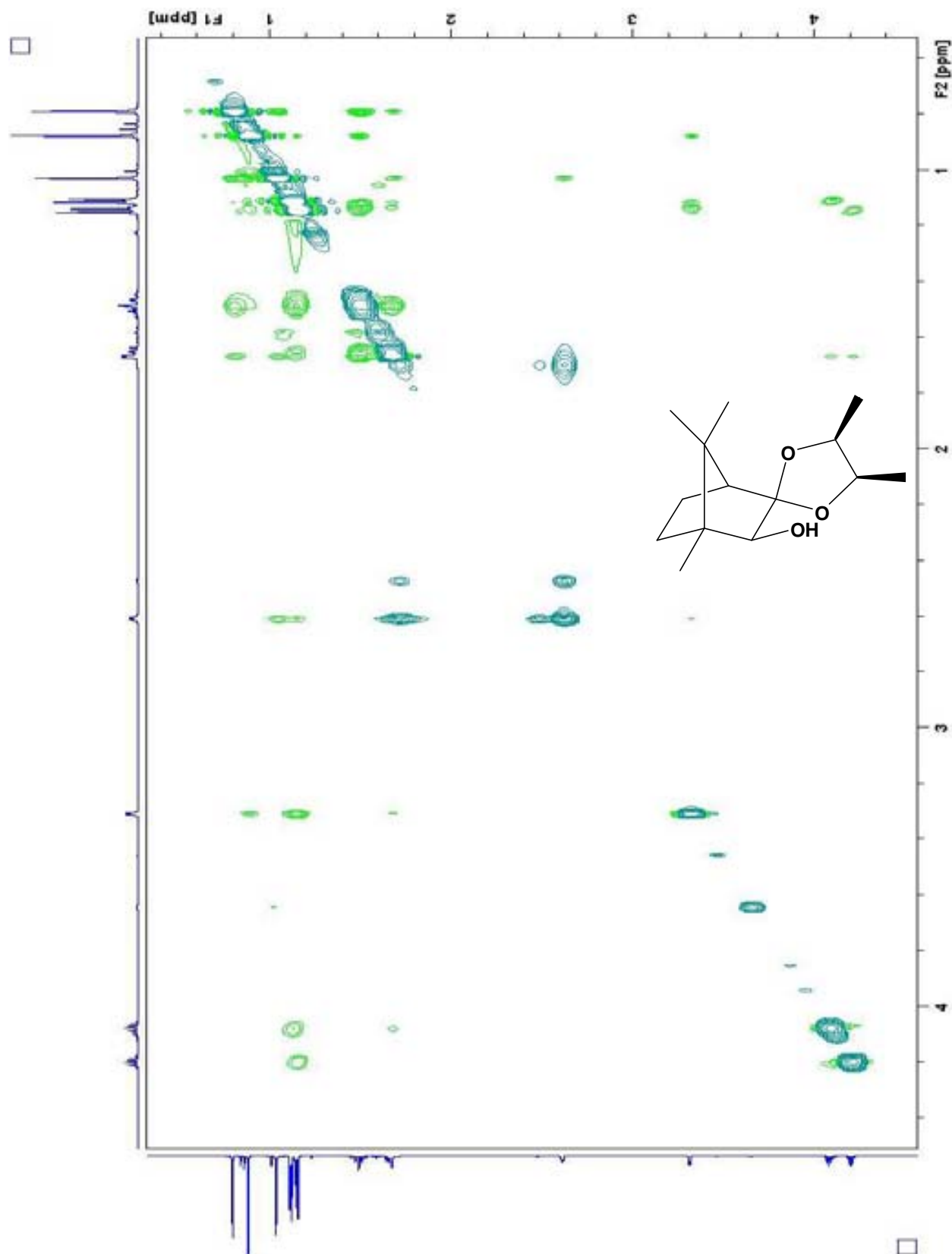


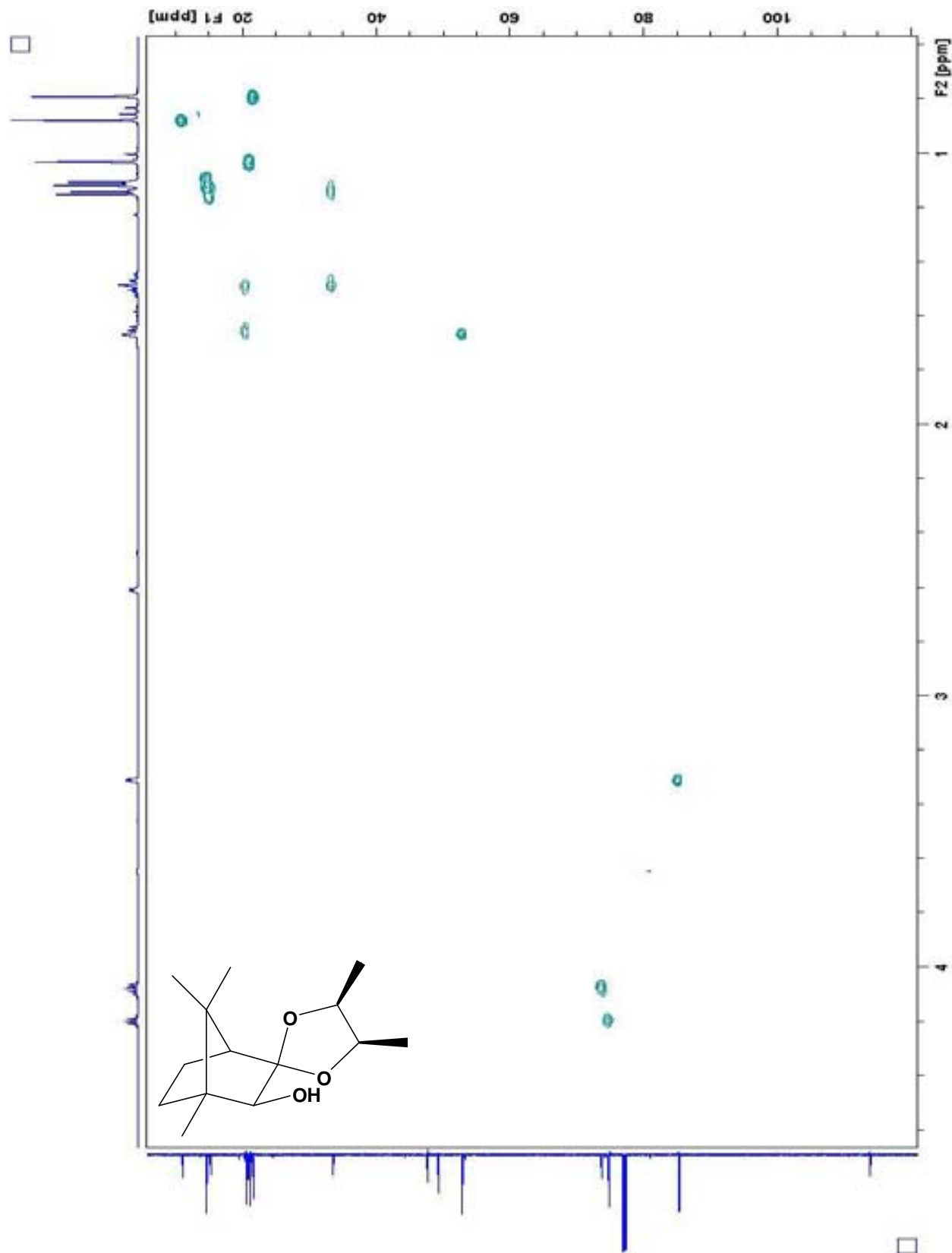
^1H NMR Spectrum (600 MHz) of Compound 10a-4



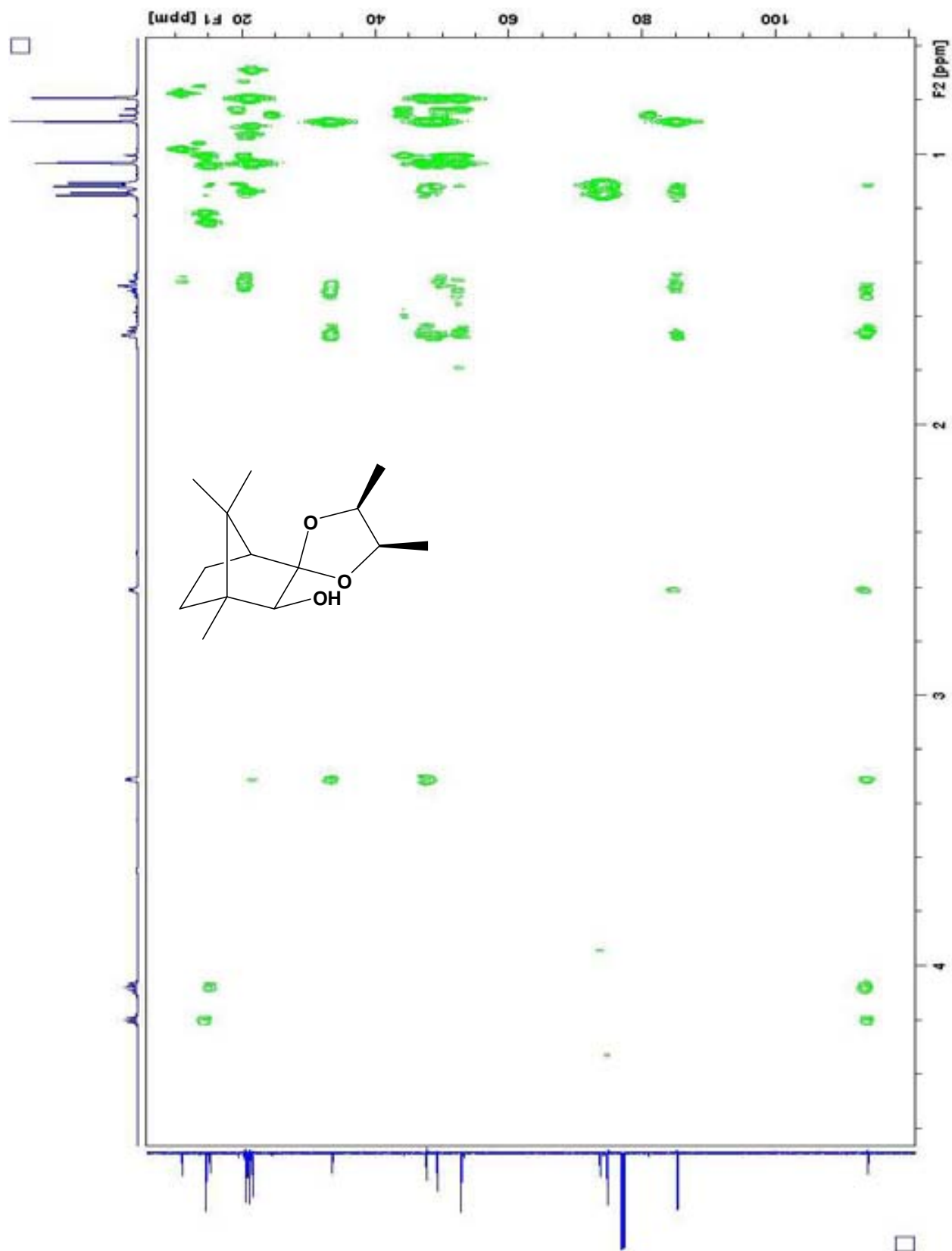
¹³C NMR Spectrum (600 MHz) of Compound **10a-4**

COSY Spectrum (600MHz) of Compound **10a-4**

NOESY Spectrum (600MHz) of Compound **10a-4**



HSQC Spectrum (600MHz) of Compound 10a-4



HMBC Spectrum (600MHz) of Compound 10a-4