

Supporting Information
for
Gold-catalyzed formation of pyrrolo- and indolo-
oxazin-1-one derivatives: The key structure of some
marine natural products

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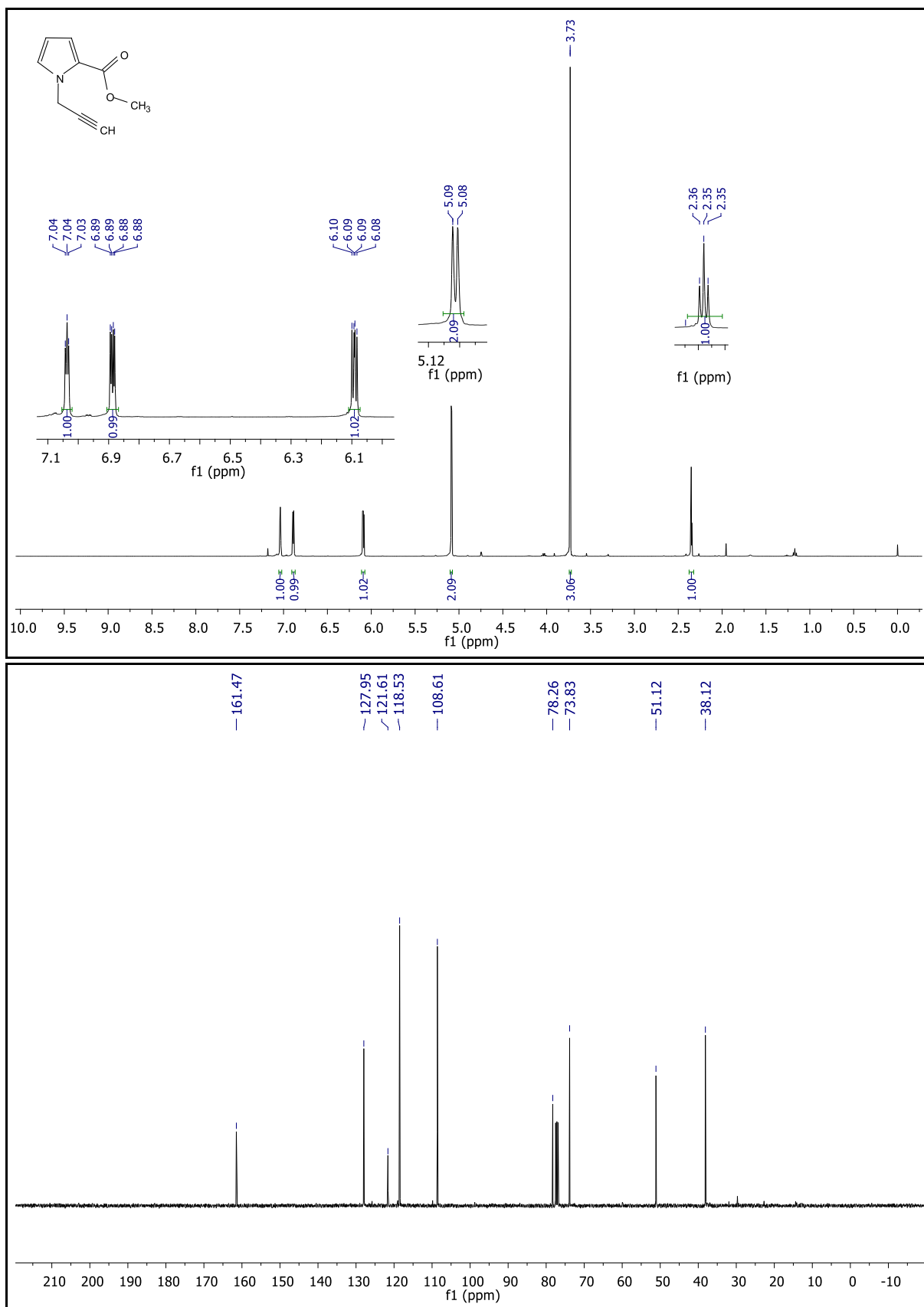


Figure 1: ^1H and ^{13}C NMR Spectra of **13** in CDCl_3

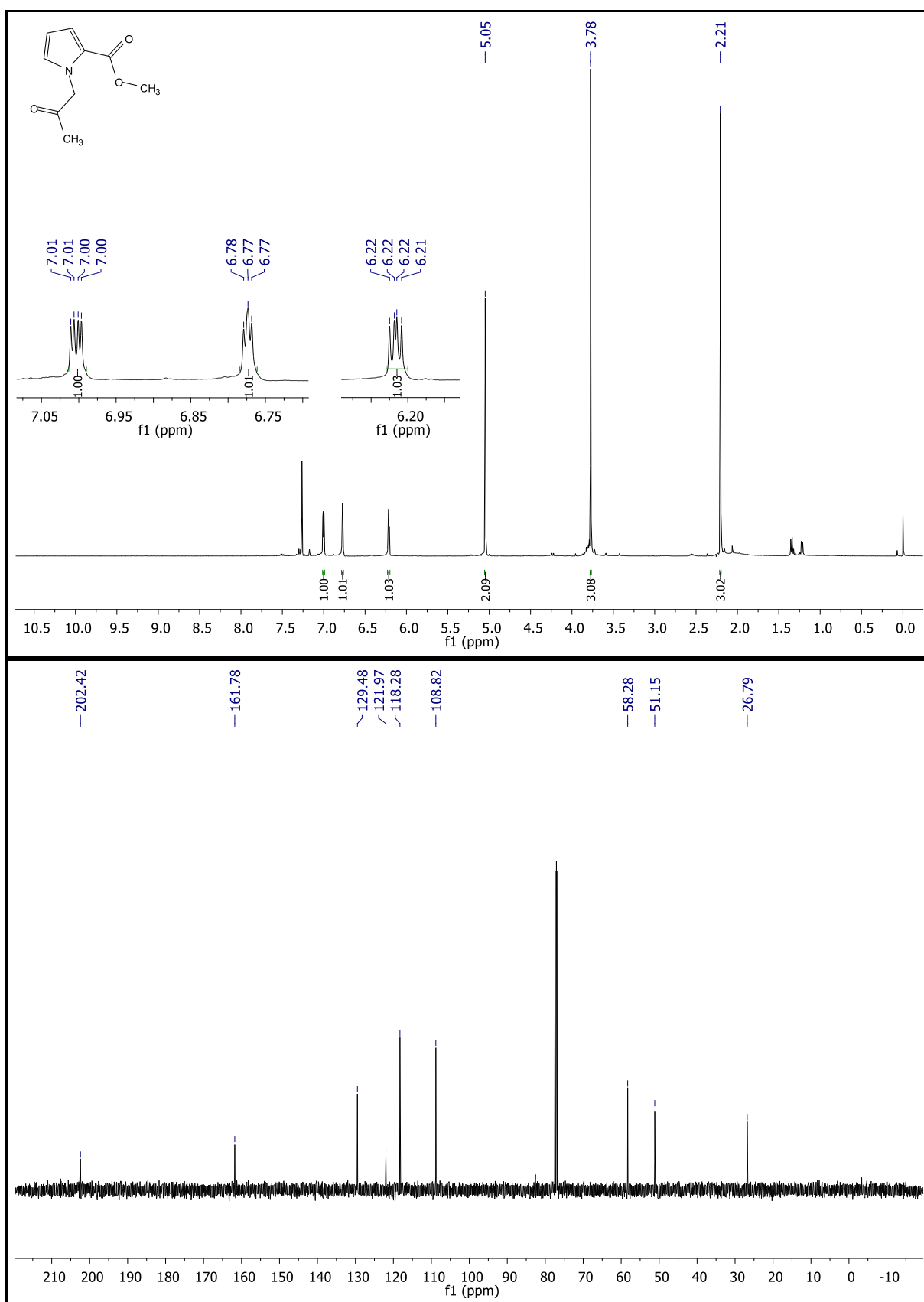


Figure 2: ¹H and ¹³C NMR Spectra of **14** in CDCl₃

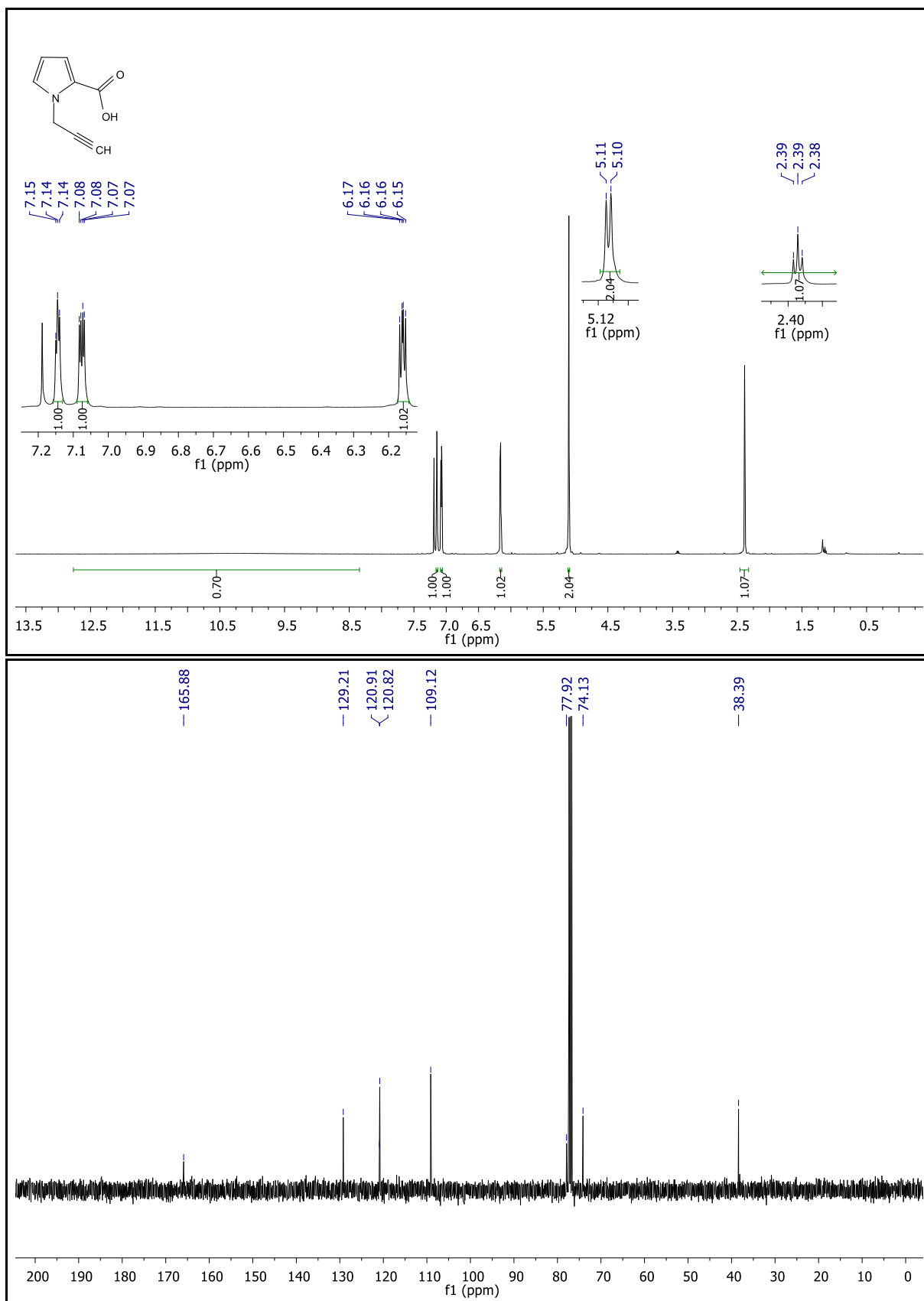


Figure 3: ¹H and ¹³C NMR Spectra of **15** in CDCl₃

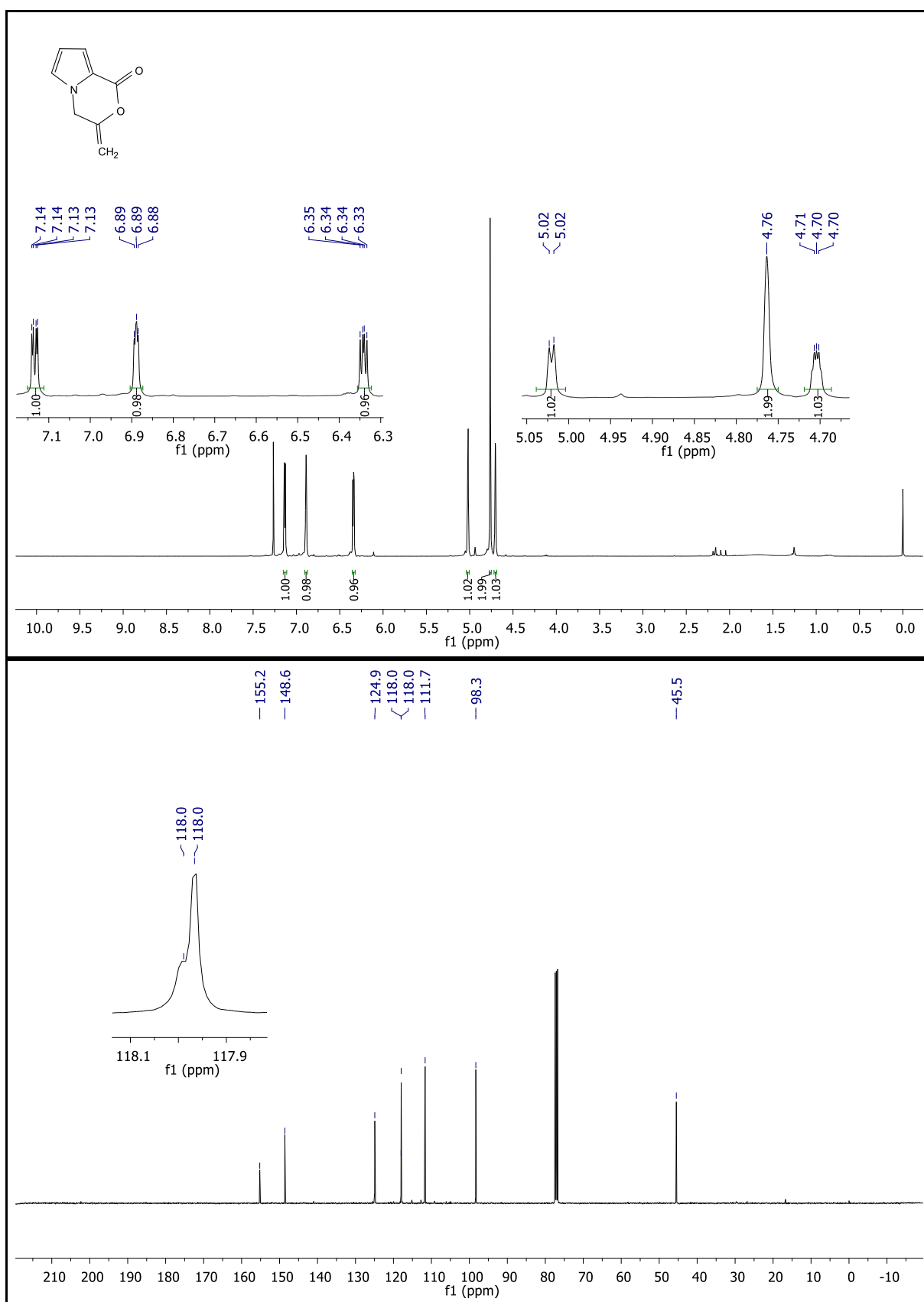


Figure 4: ¹H and ¹³C NMR Spectra of 7 in CDCl₃

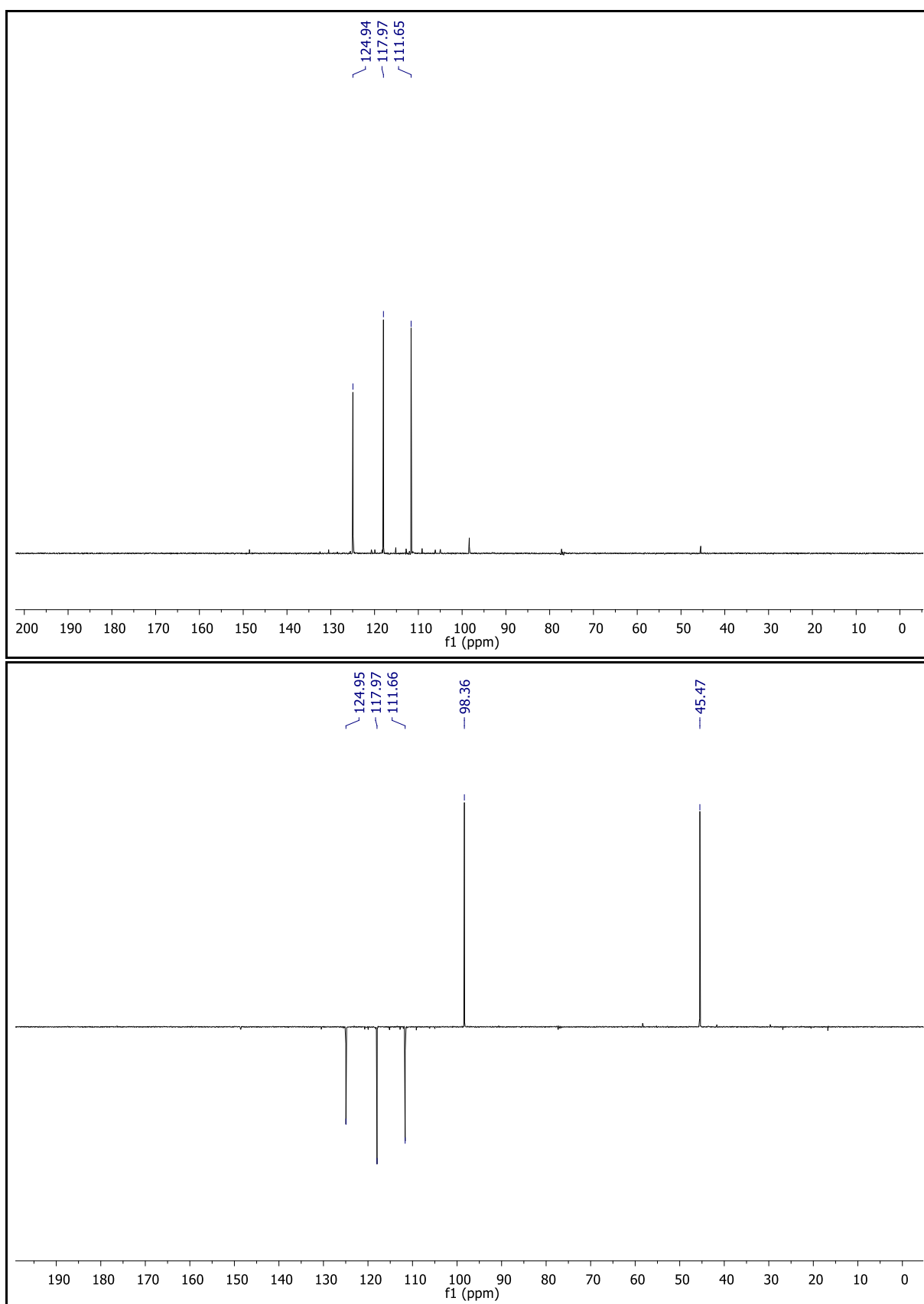


Figure 5: DEPT 90 and DEPT 135 Spectra of **7** in CDCl_3

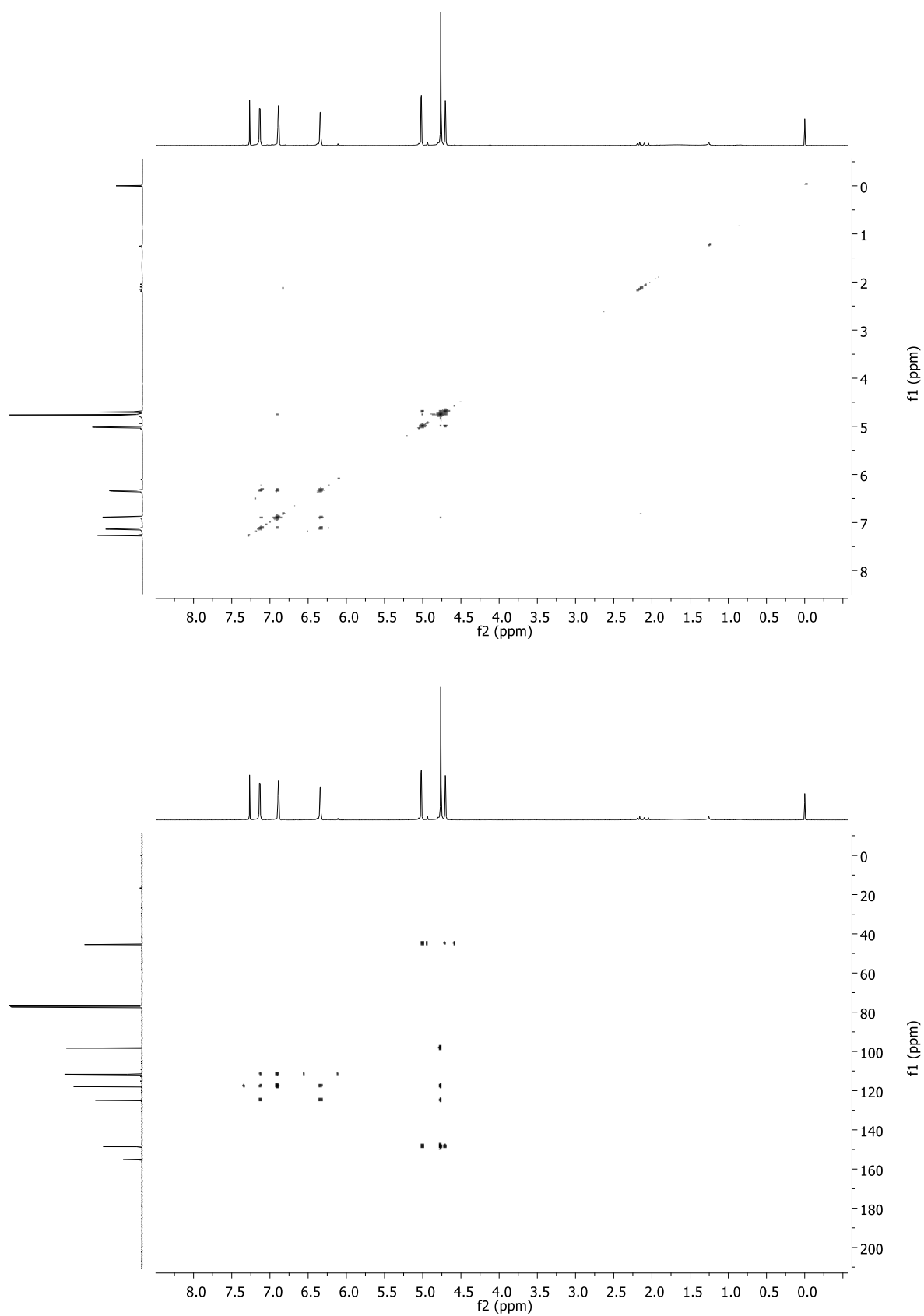


Figure 6: COSY and HMBC Spectra of **7** in CDCl₃

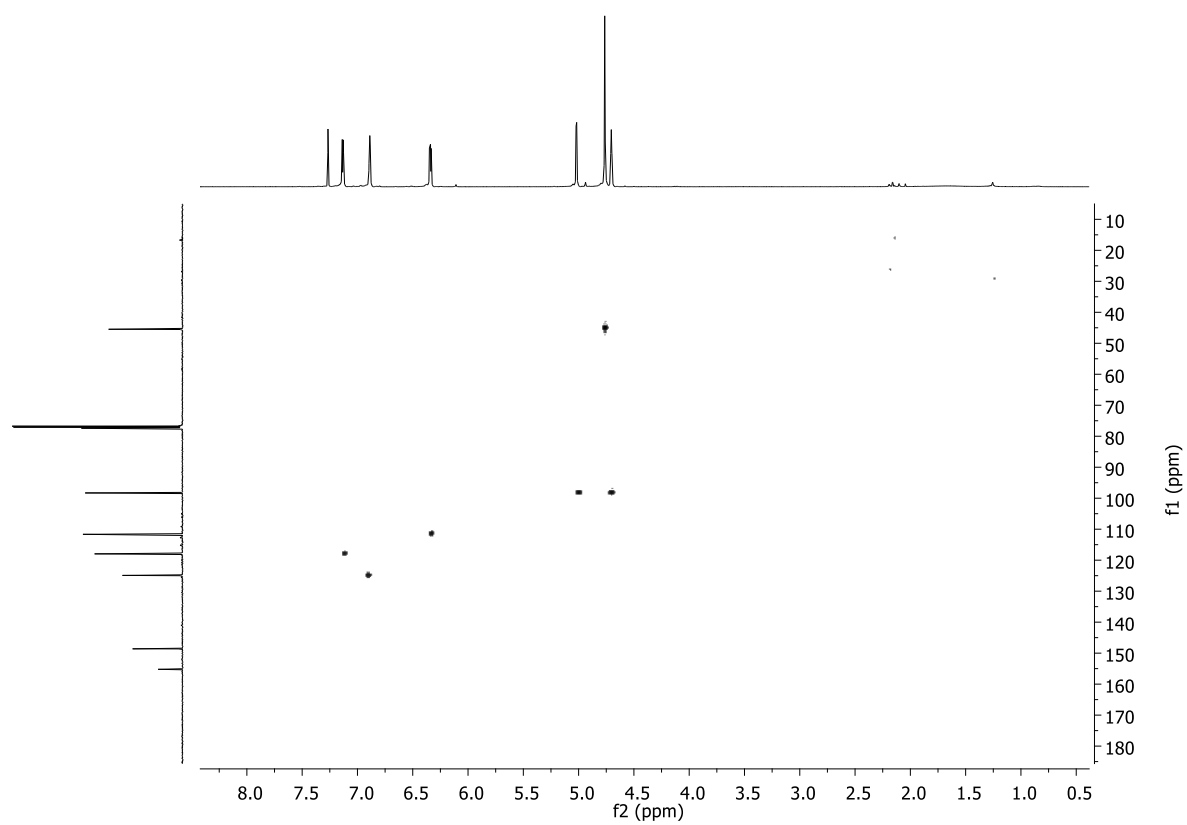


Figure 7: HSQC Spectra of 7 in CDCl₃

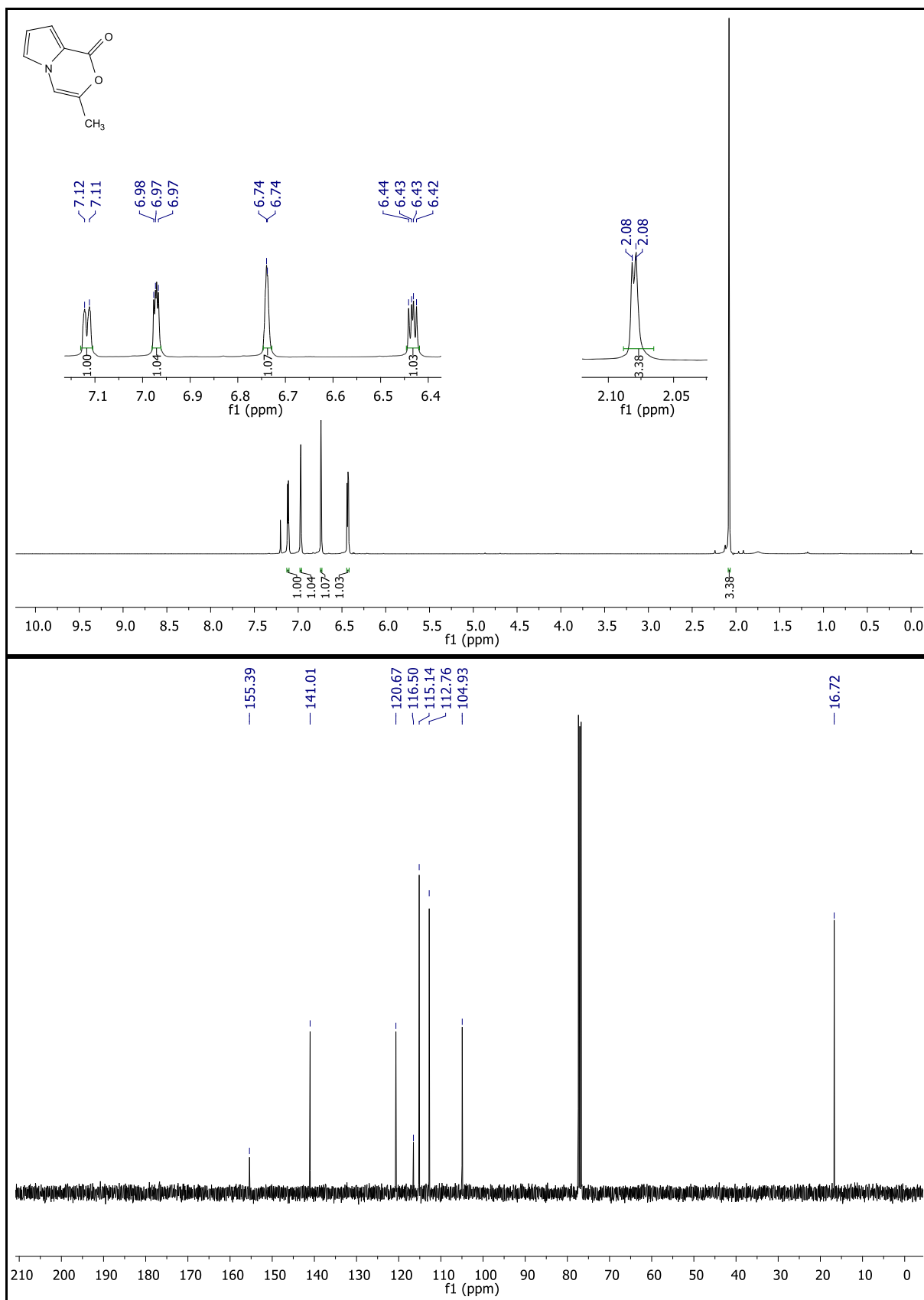


Figure 8: ¹H and ¹³C NMR Spectra of **6** in CDCl₃

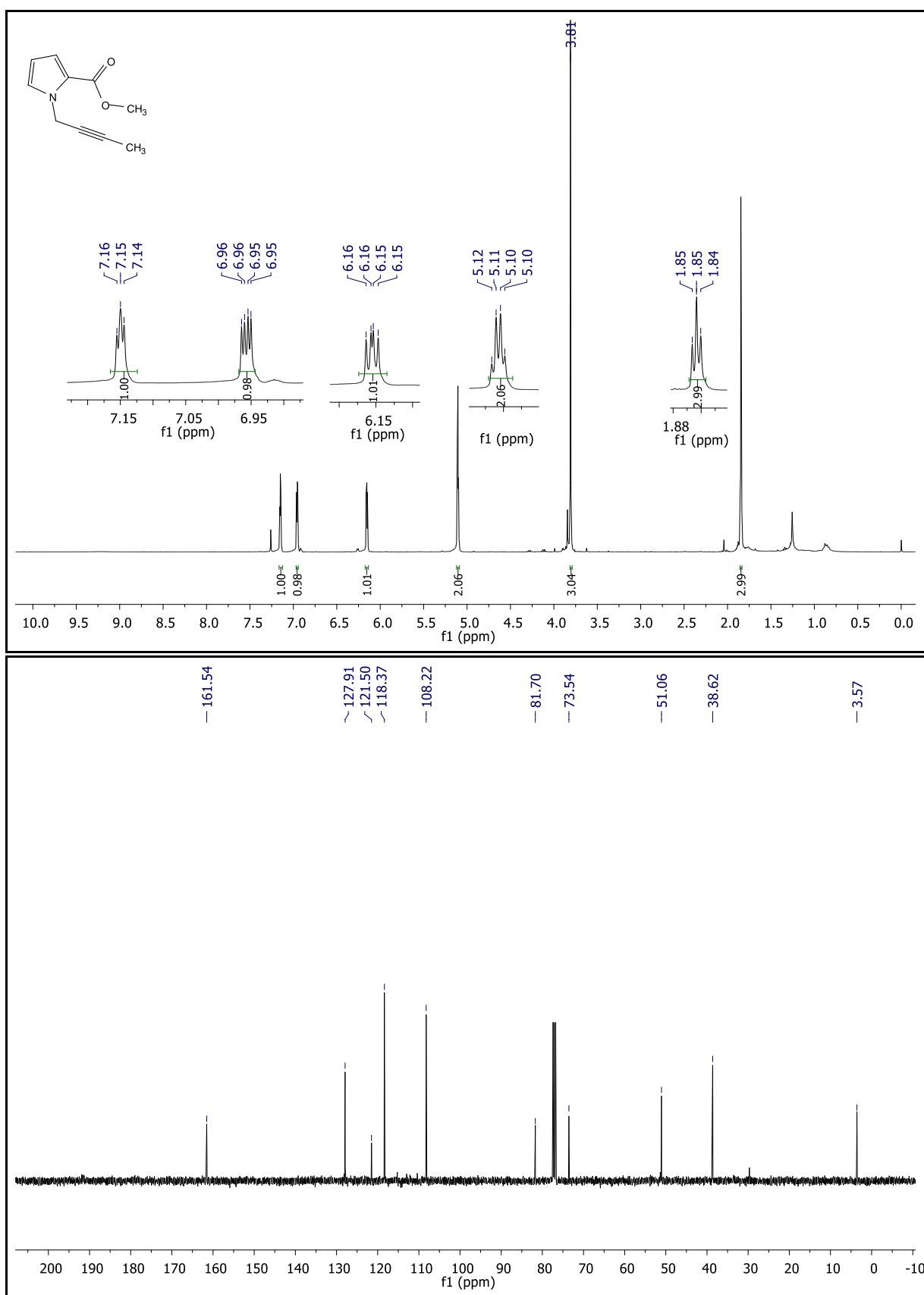


Figure 9: ¹H and ¹³C NMR Spectra of **16** in CDCl₃

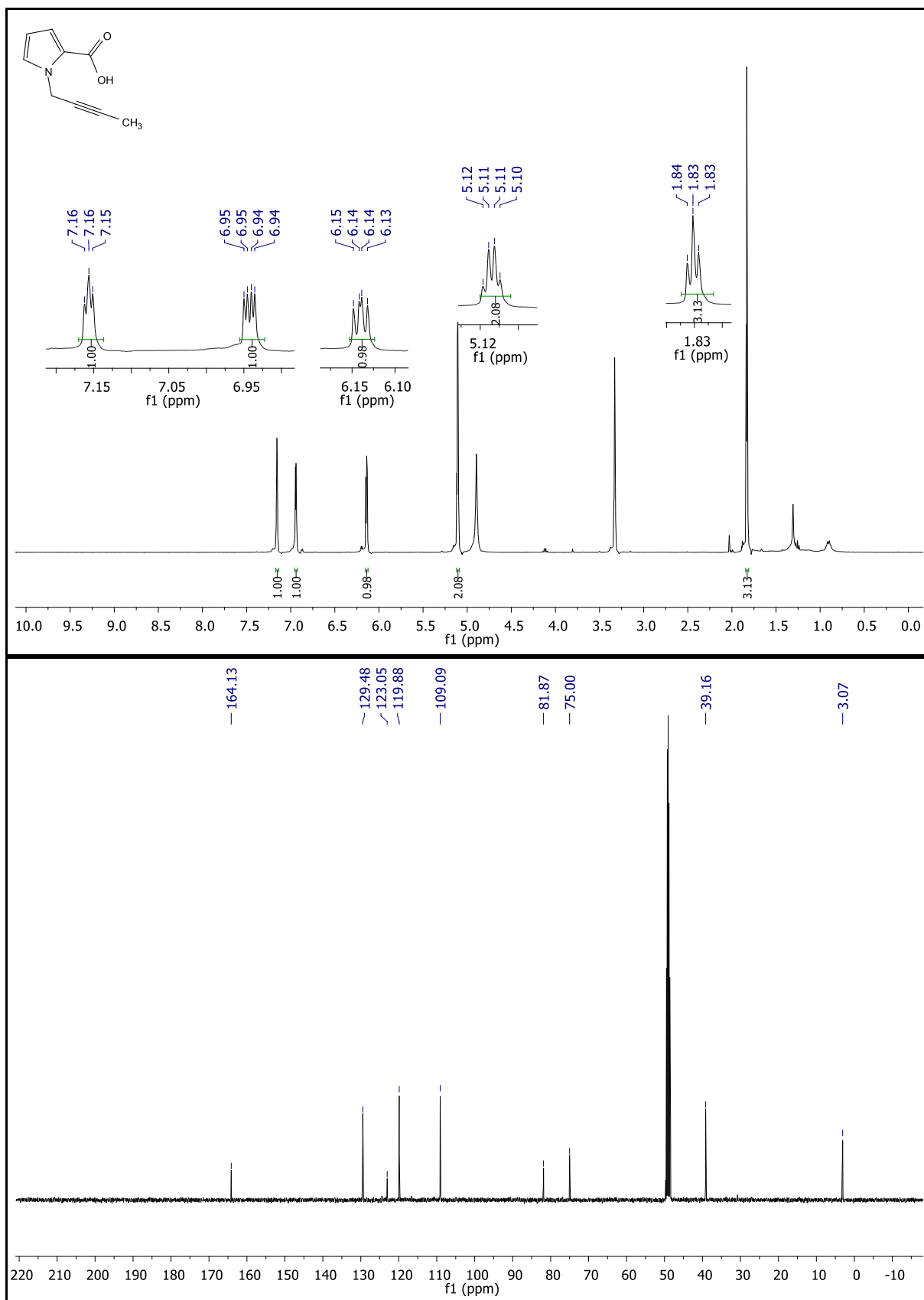


Figure 10: ¹H and ¹³C NMR Spectra of **17** in CD₃OD

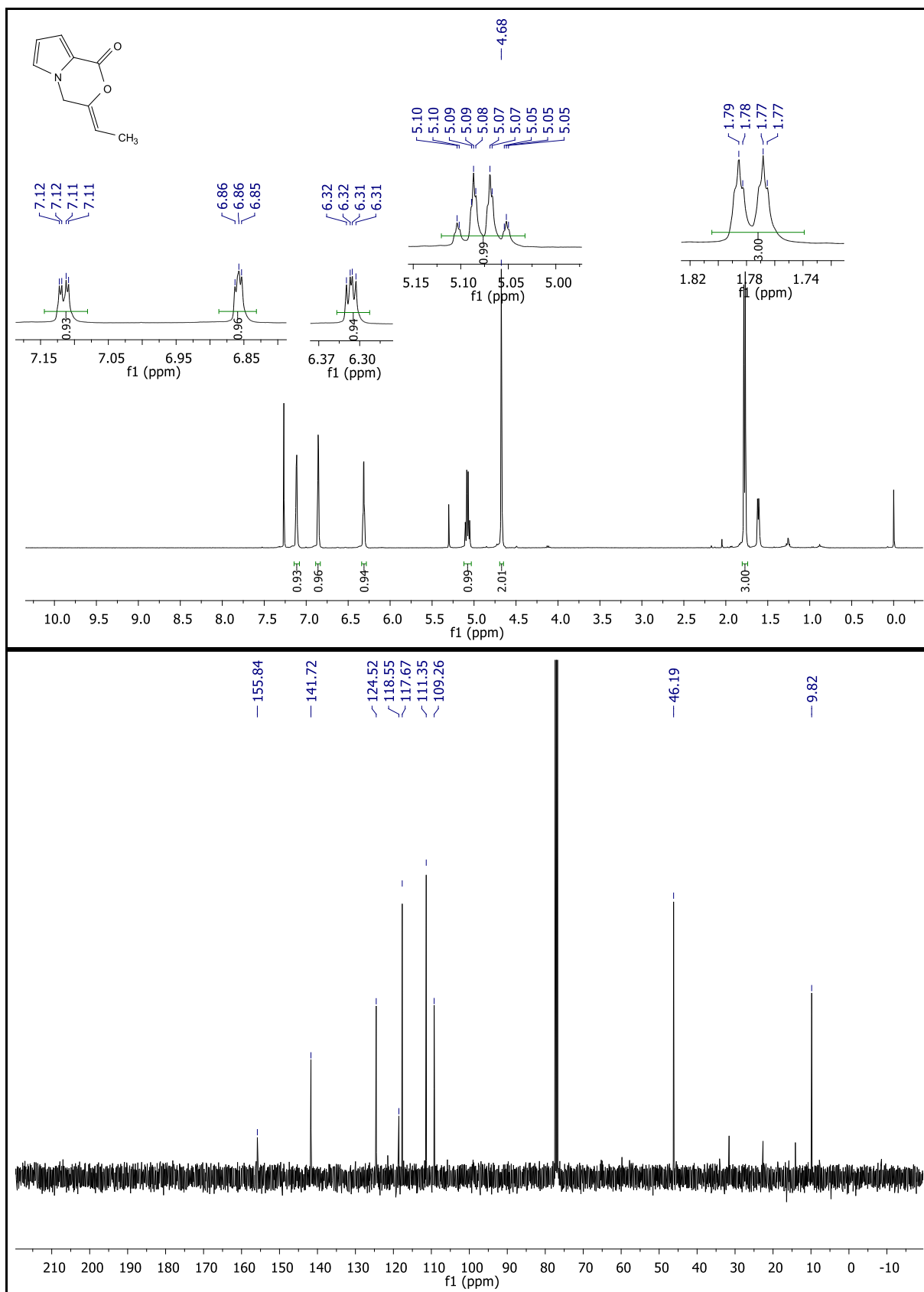


Figure 11: ¹H and ¹³C NMR Spectra of **18** in CDCl₃

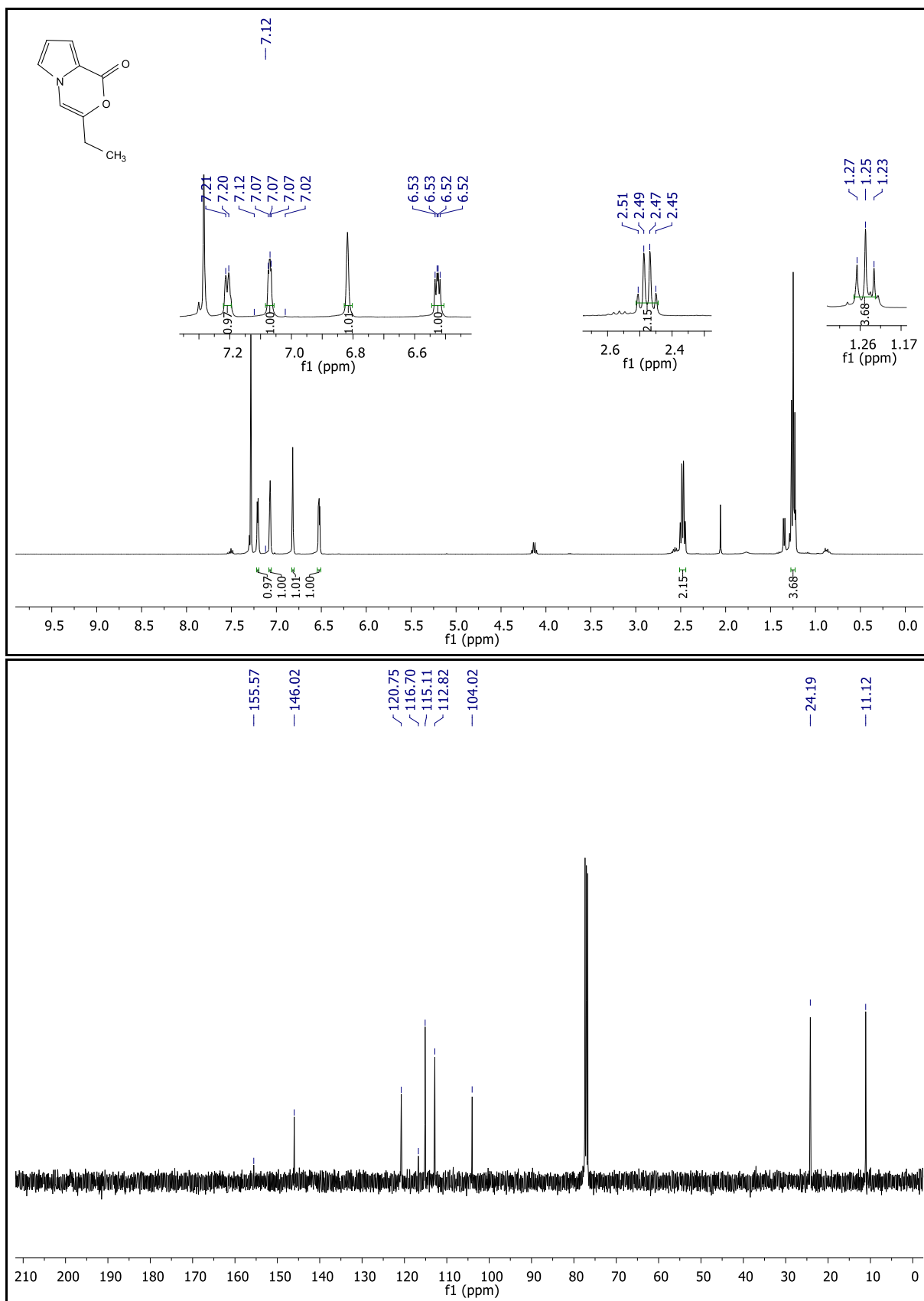


Figure 12: ¹H and ¹³C NMR Spectra of **19** in CDCl₃

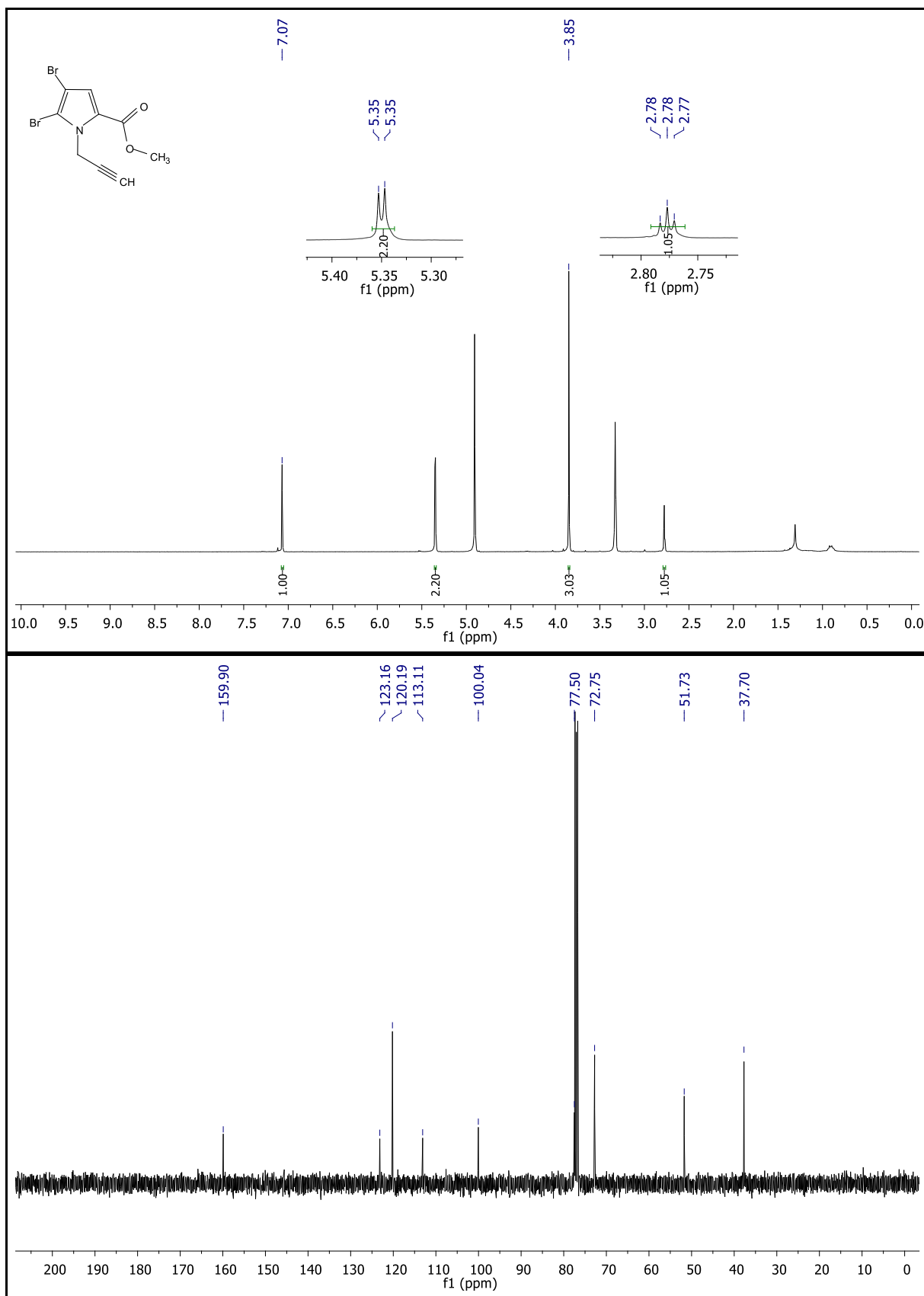


Figure 13: ¹H and ¹³C NMR Spectra of **20** in CDCl₃

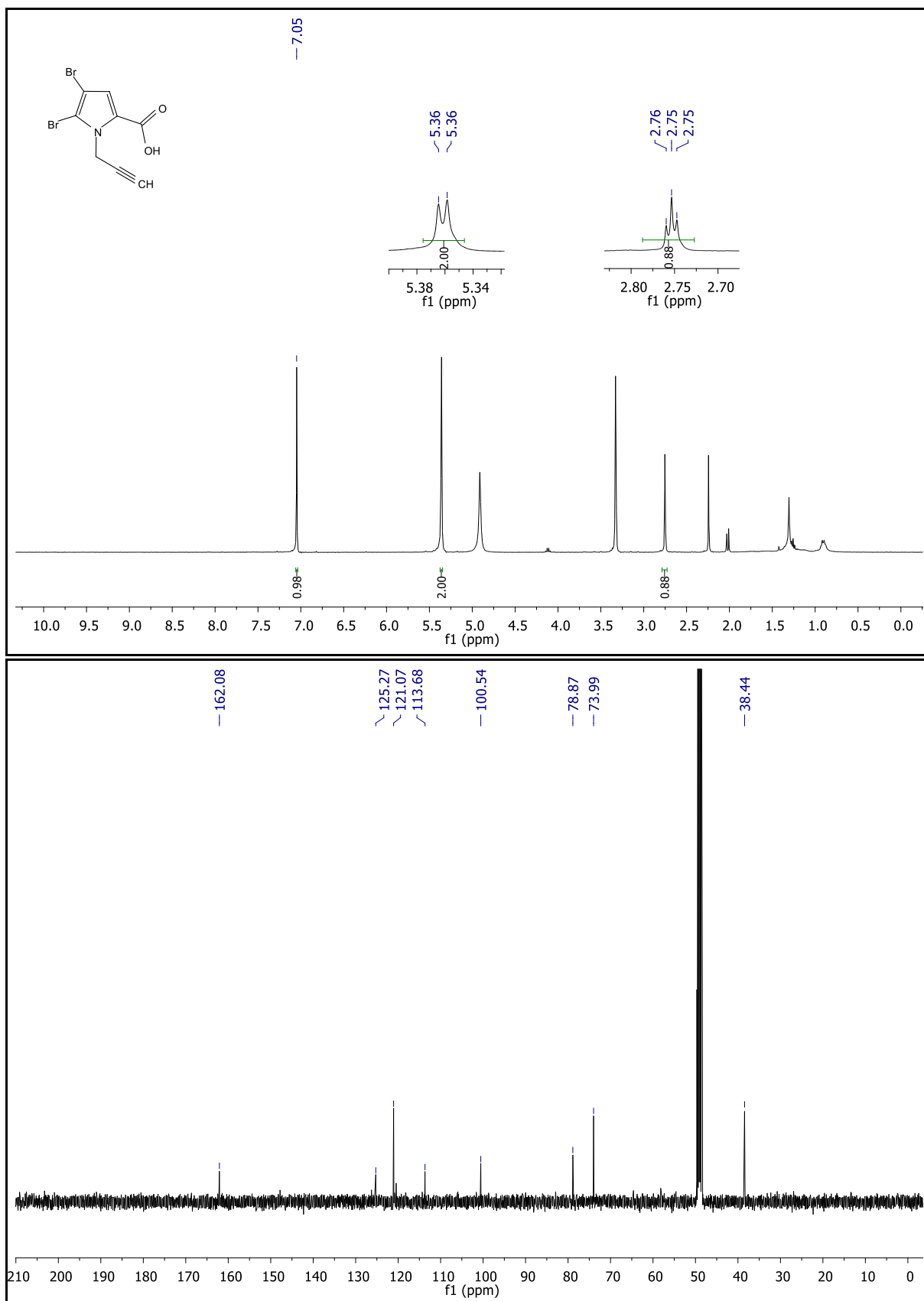


Figure 14: ¹H and ¹³C NMR Spectra of **21** in CD₃OD

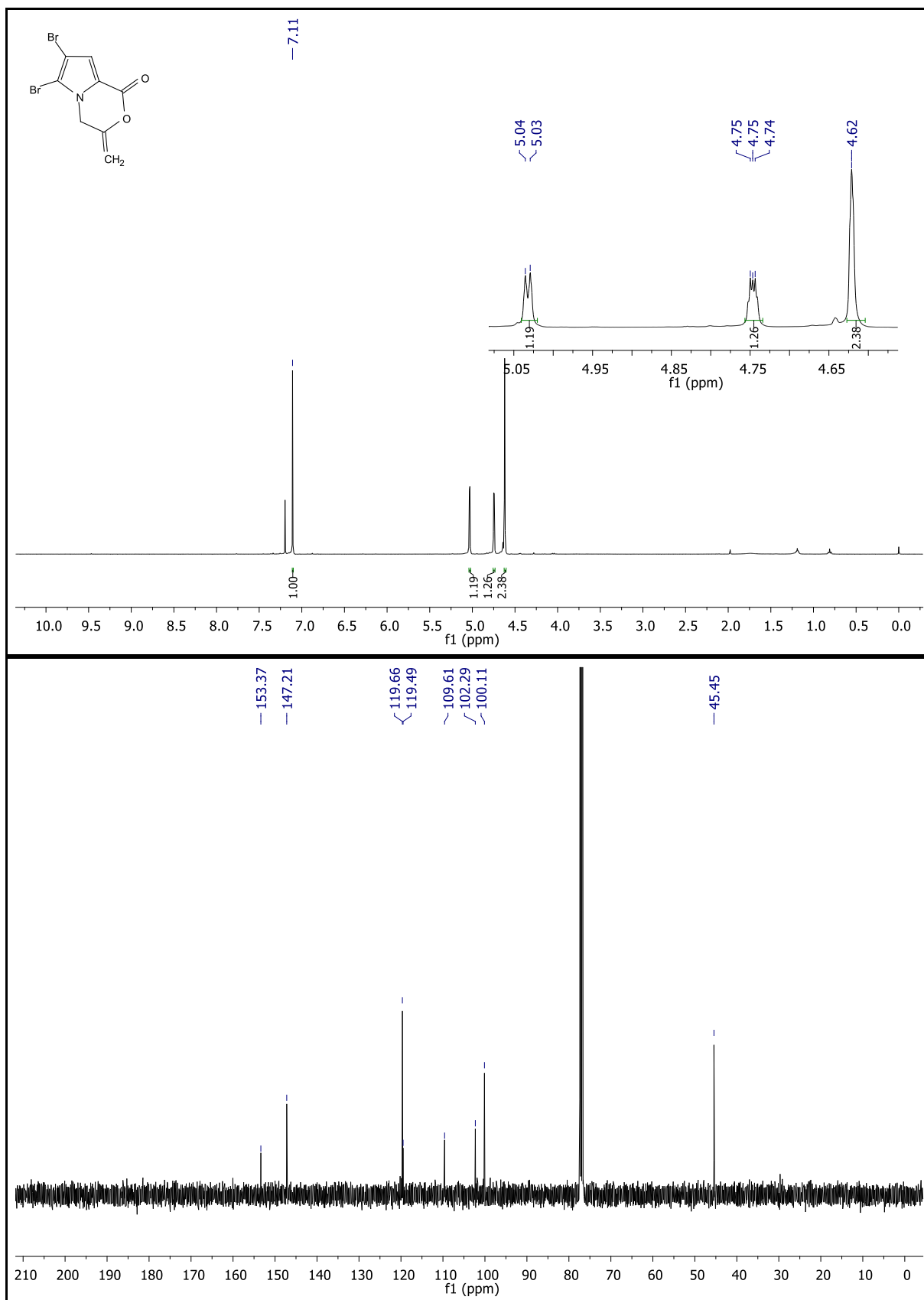


Figure 15: ¹H and ¹³C NMR Spectra of **22** in CDCl₃

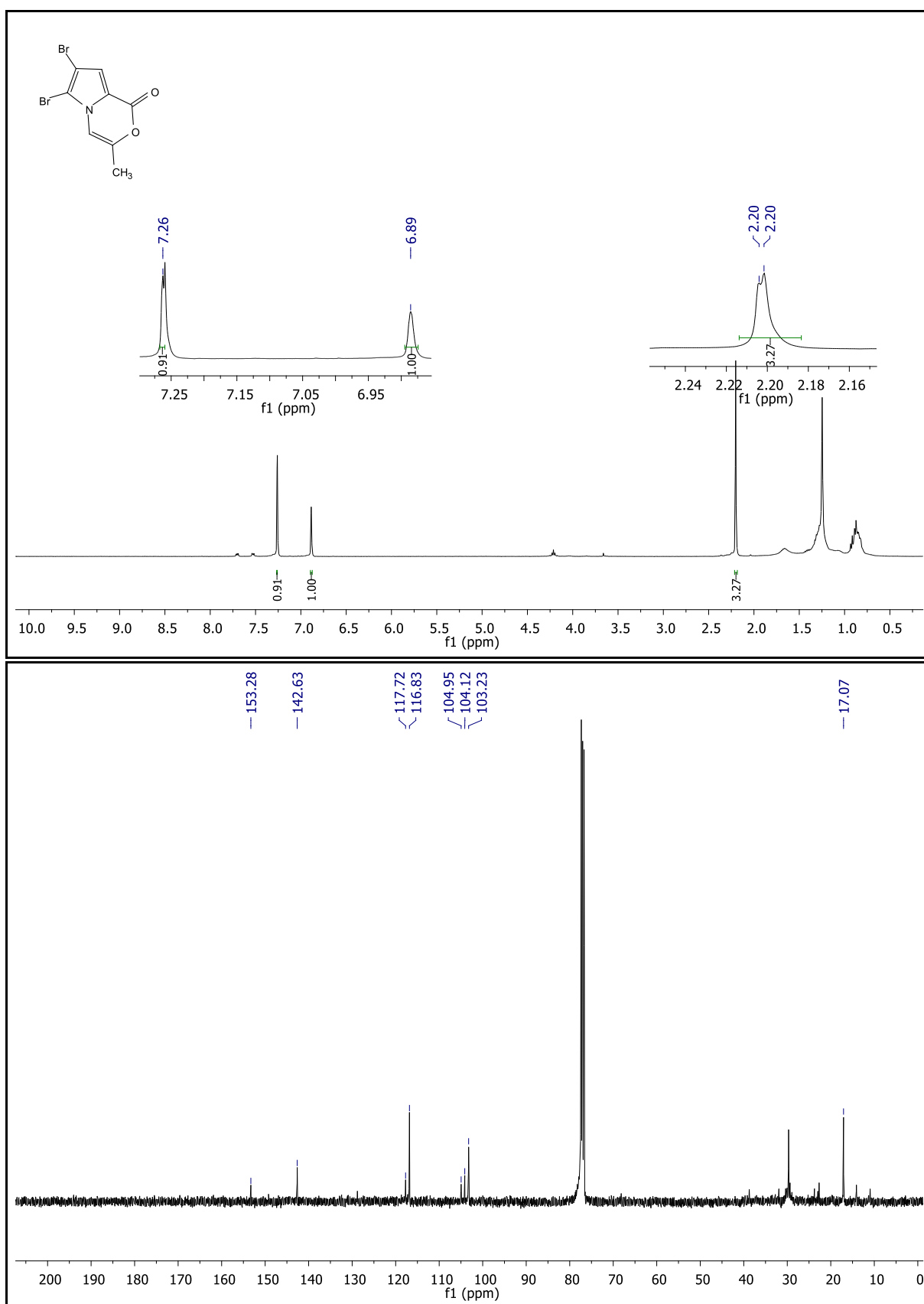


Figure 16: ^1H and ^{13}C NMR Spectra of **23** in CDCl_3

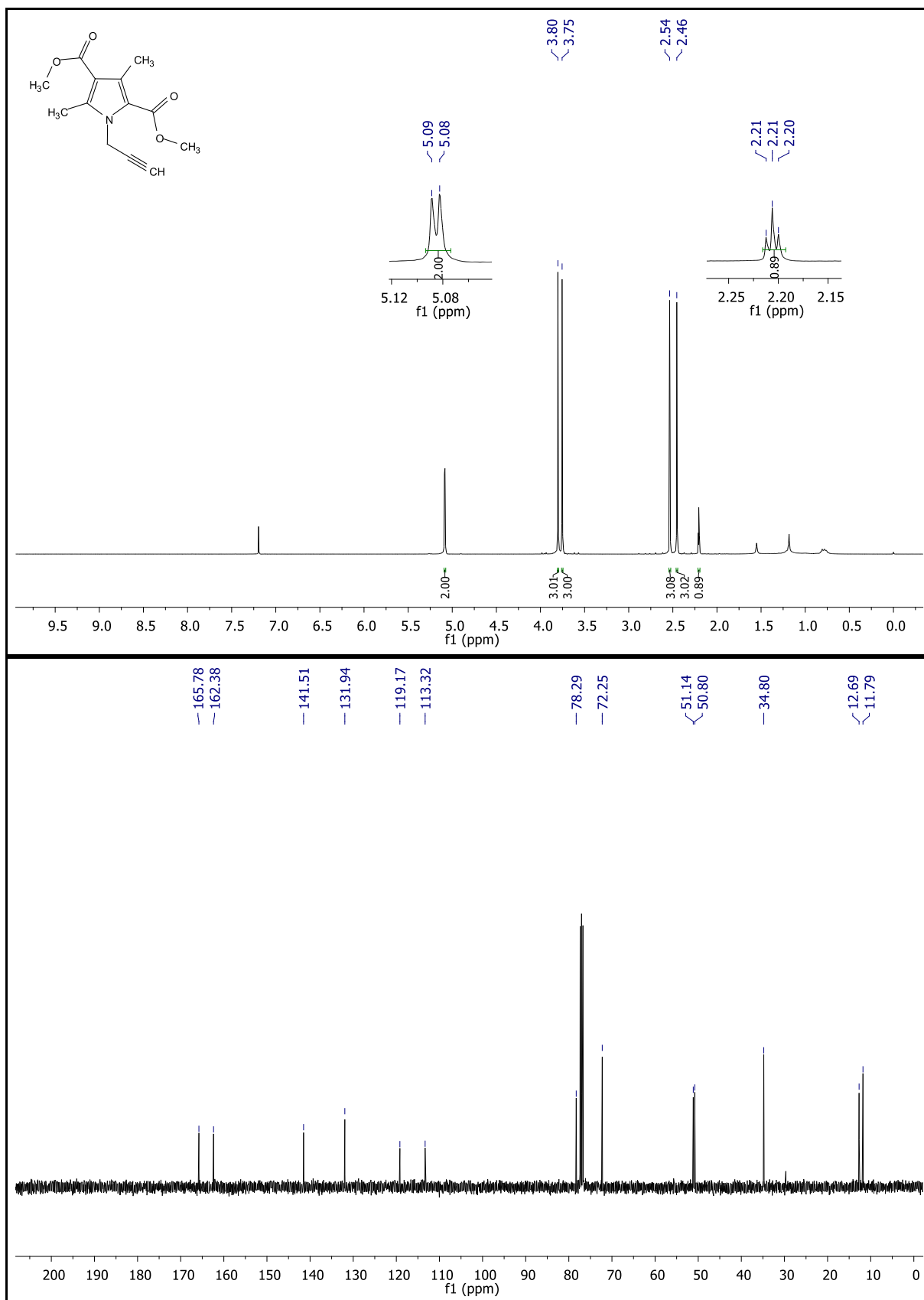


Figure 17: ¹H and ¹³C NMR Spectra of **24** in CDCl₃

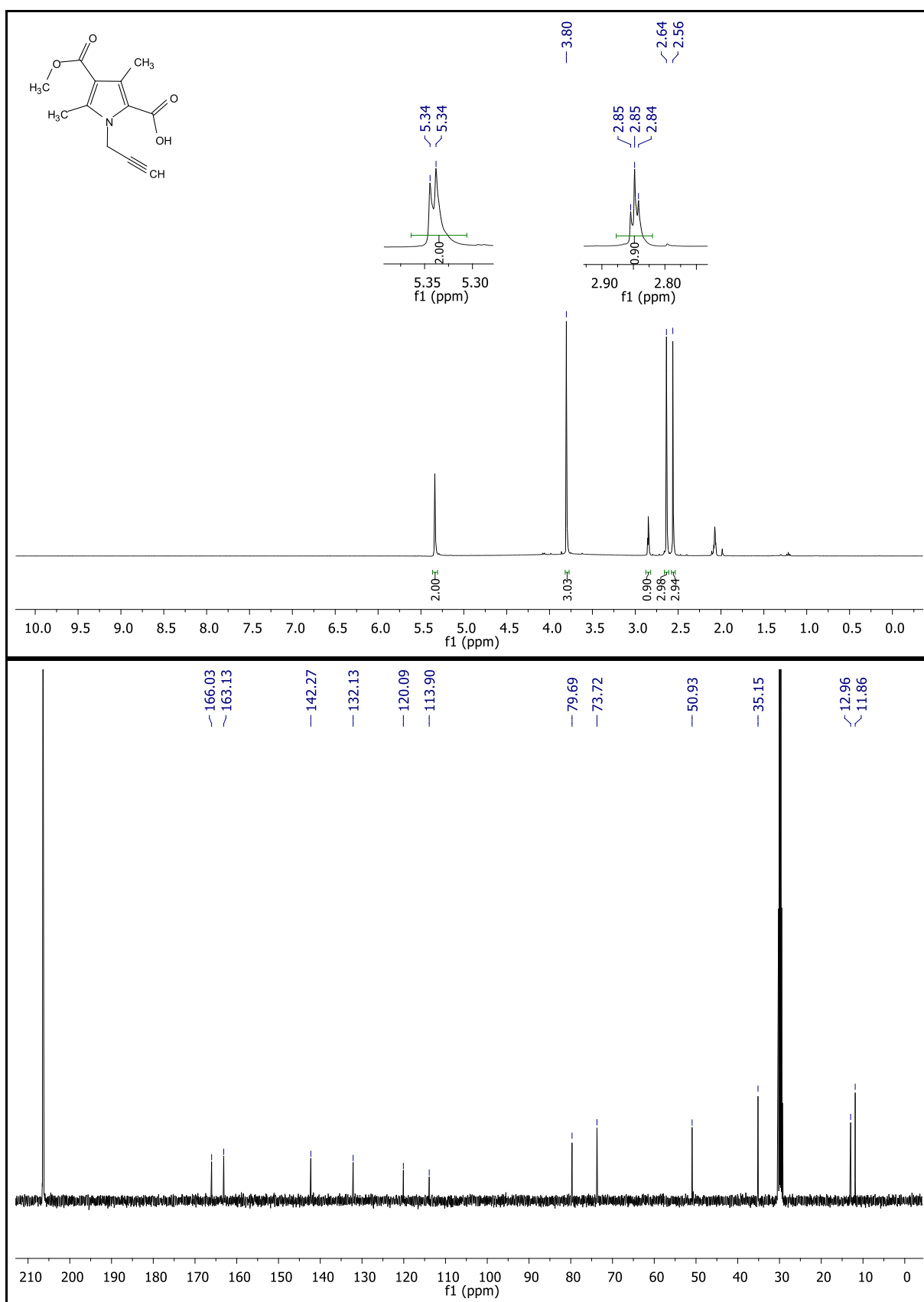


Figure 18: ^1H and ^{13}C NMR Spectra of **25** in CD_3COCD_3

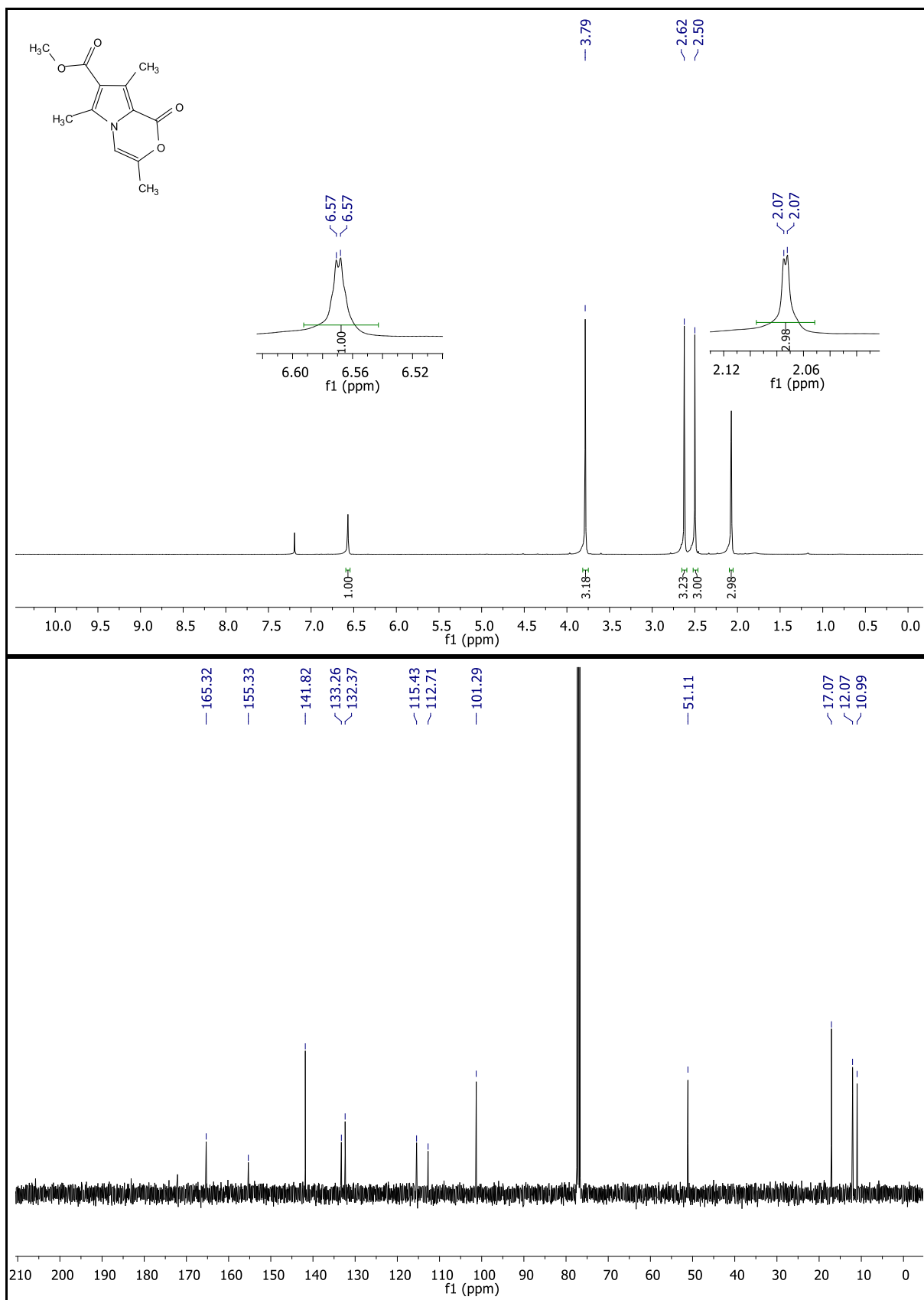


Figure 19: ^1H and ^{13}C NMR Spectra of **27** in CDCl_3

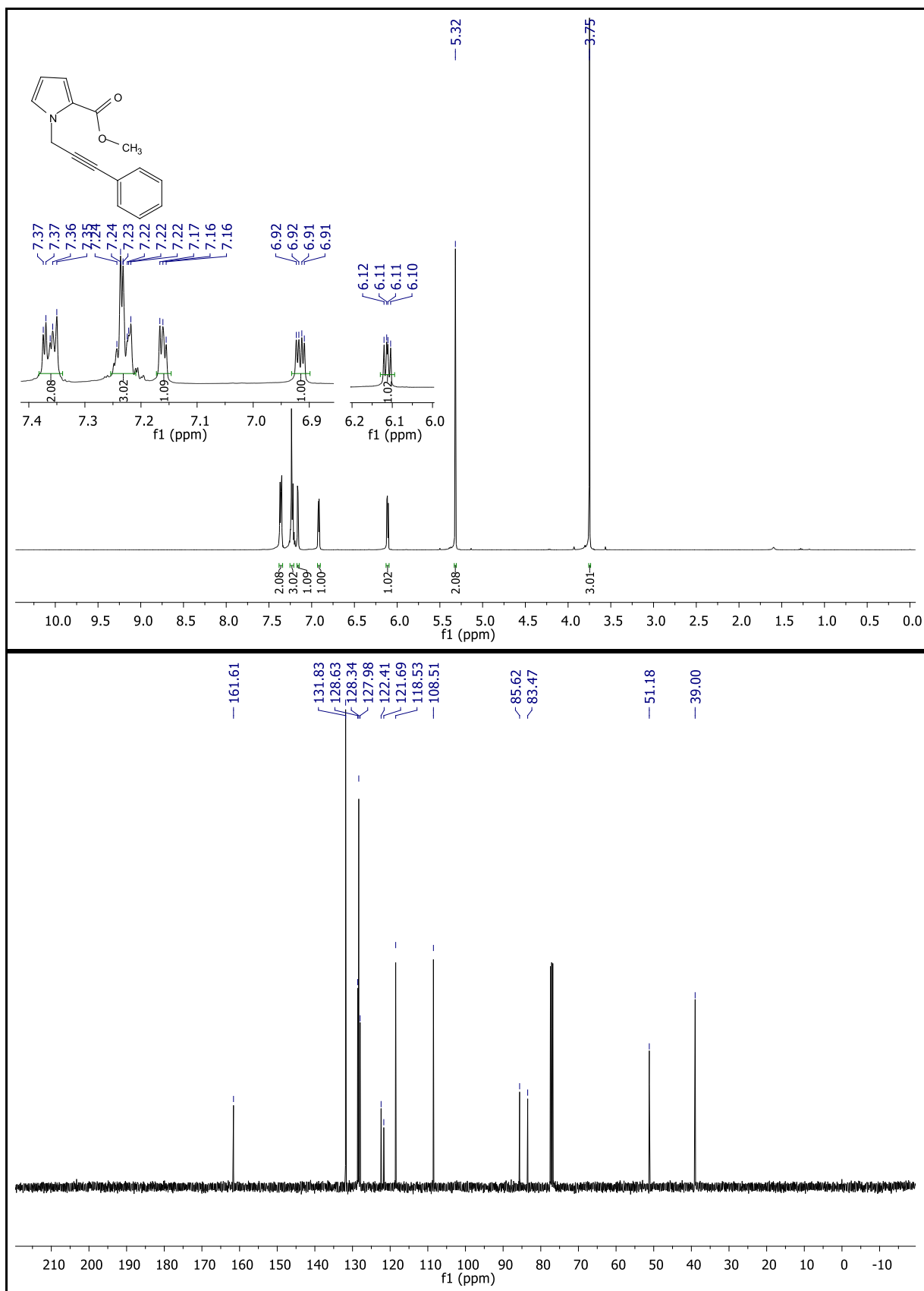


Figure 20: ^1H and ^{13}C NMR Spectra of **28** in CDCl_3

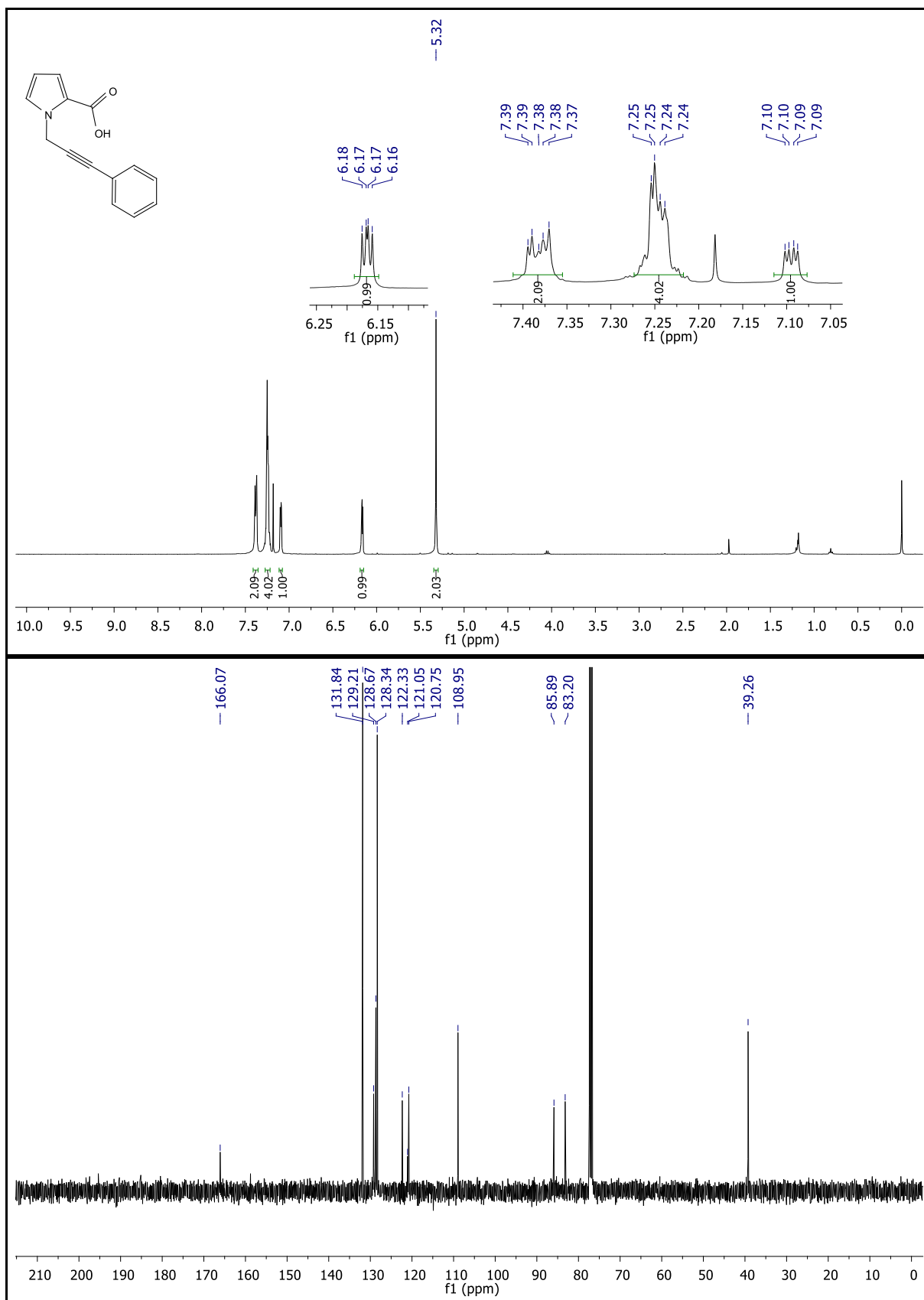


Figure 21: ¹H and ¹³C NMR Spectra of **29** in CDCl₃

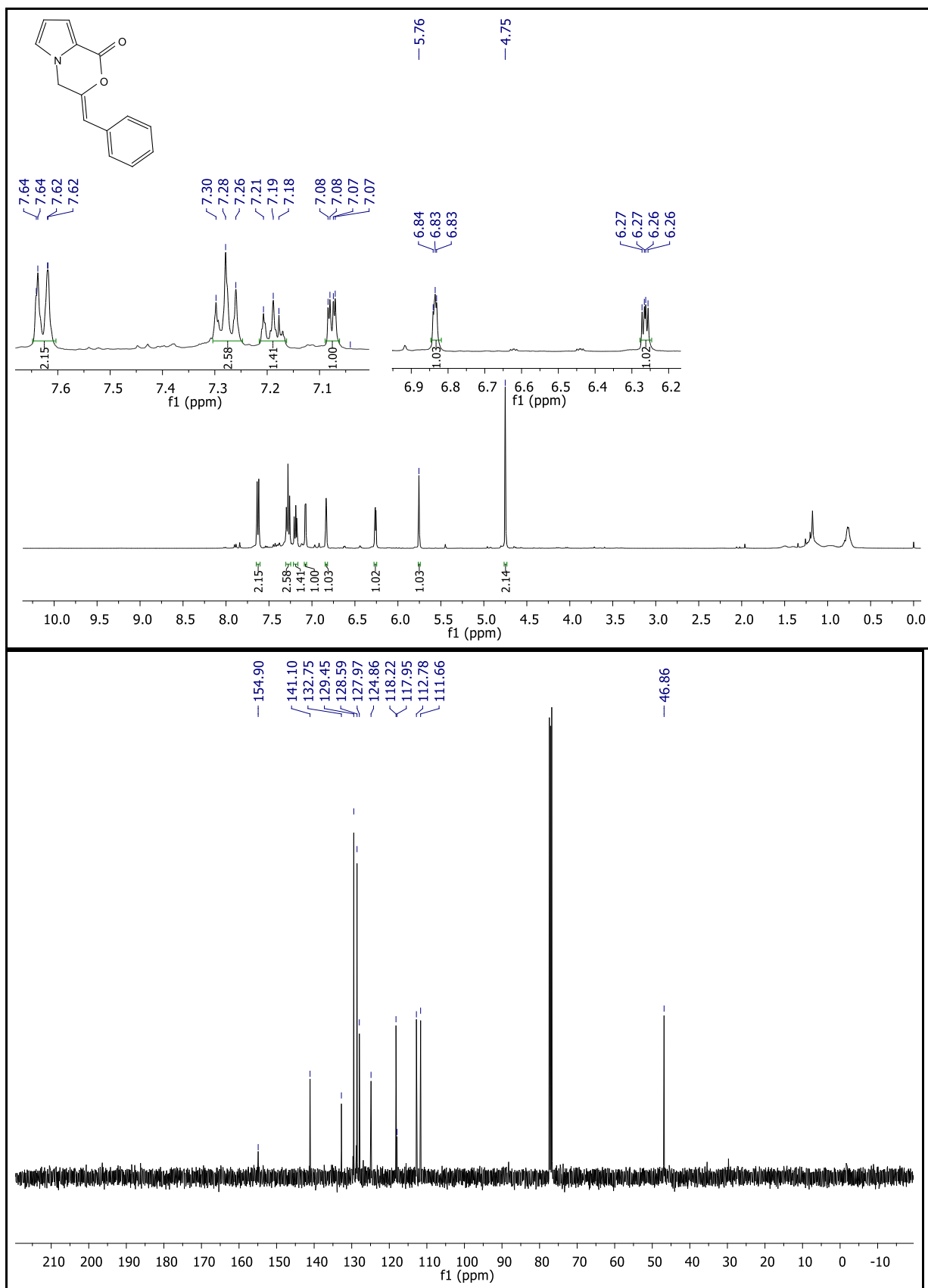


Figure 22: ¹H and ¹³C NMR Spectra of **30** in CDCl₃

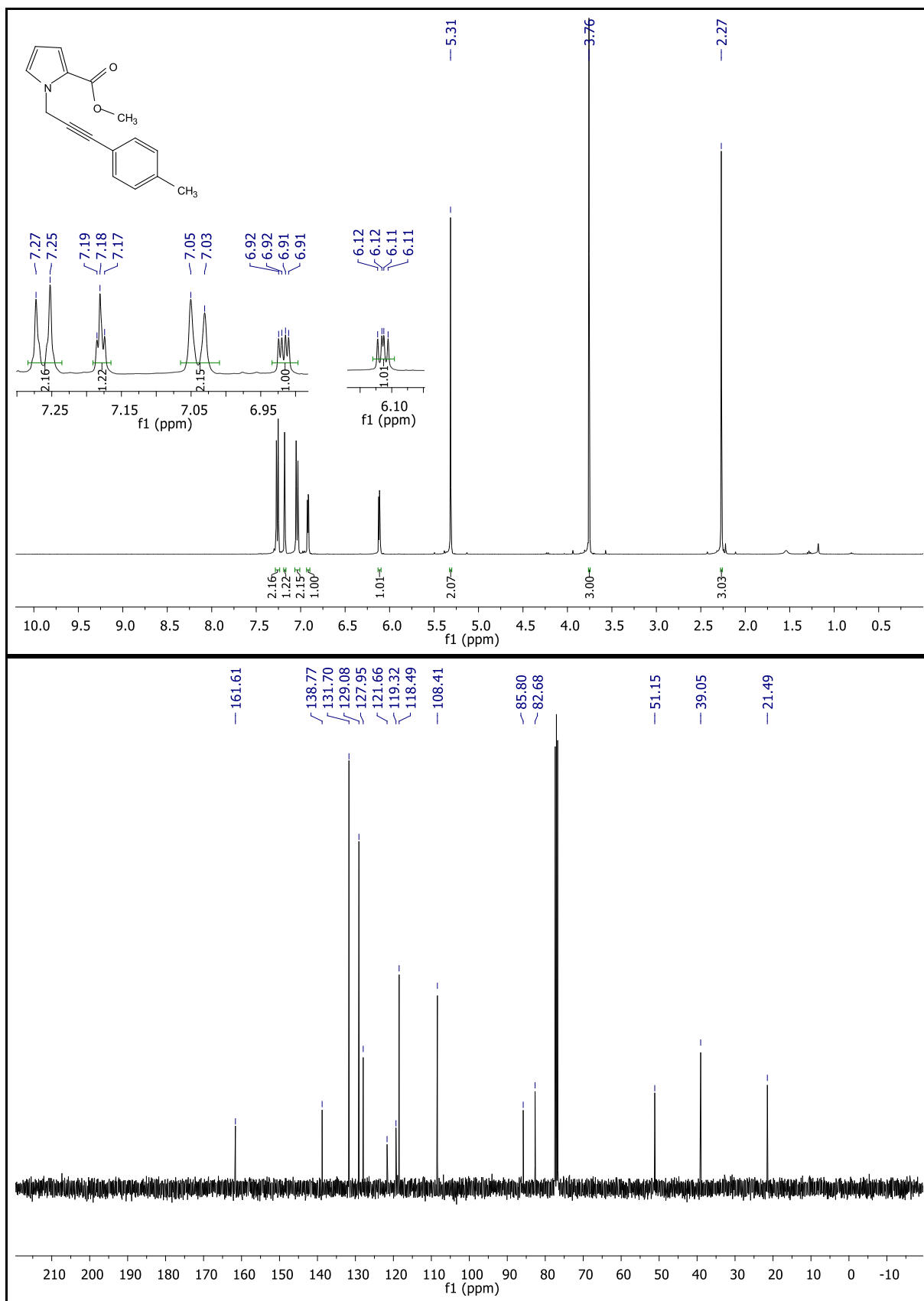


Figure 23: ¹H and ¹³C NMR Spectra of **32** in CDCl₃

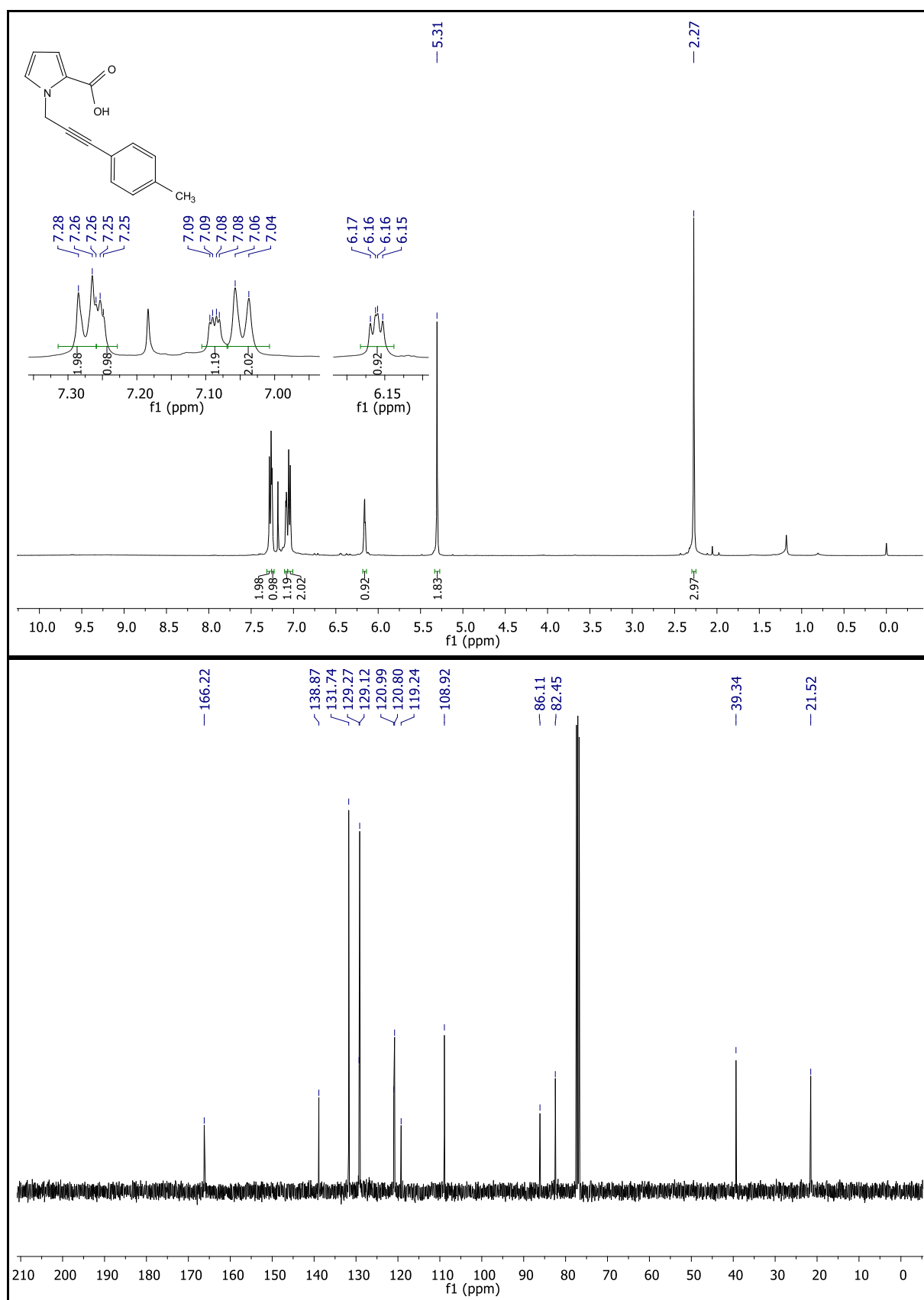


Figure 24: ¹H and ¹³C NMR Spectra of **33** in CDCl₃

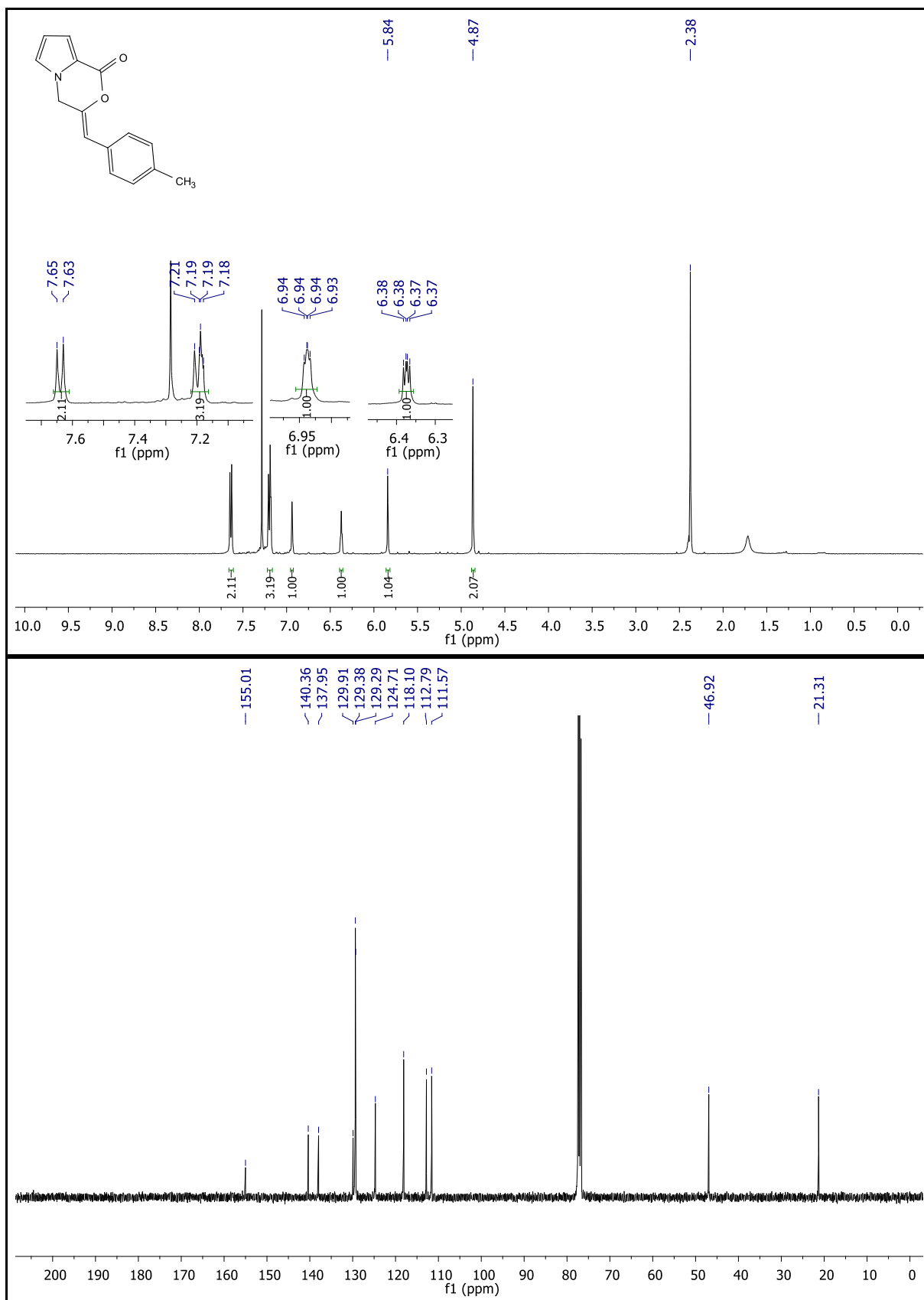


Figure 25: ¹H and ¹³C NMR Spectra of **34** in CDCl₃

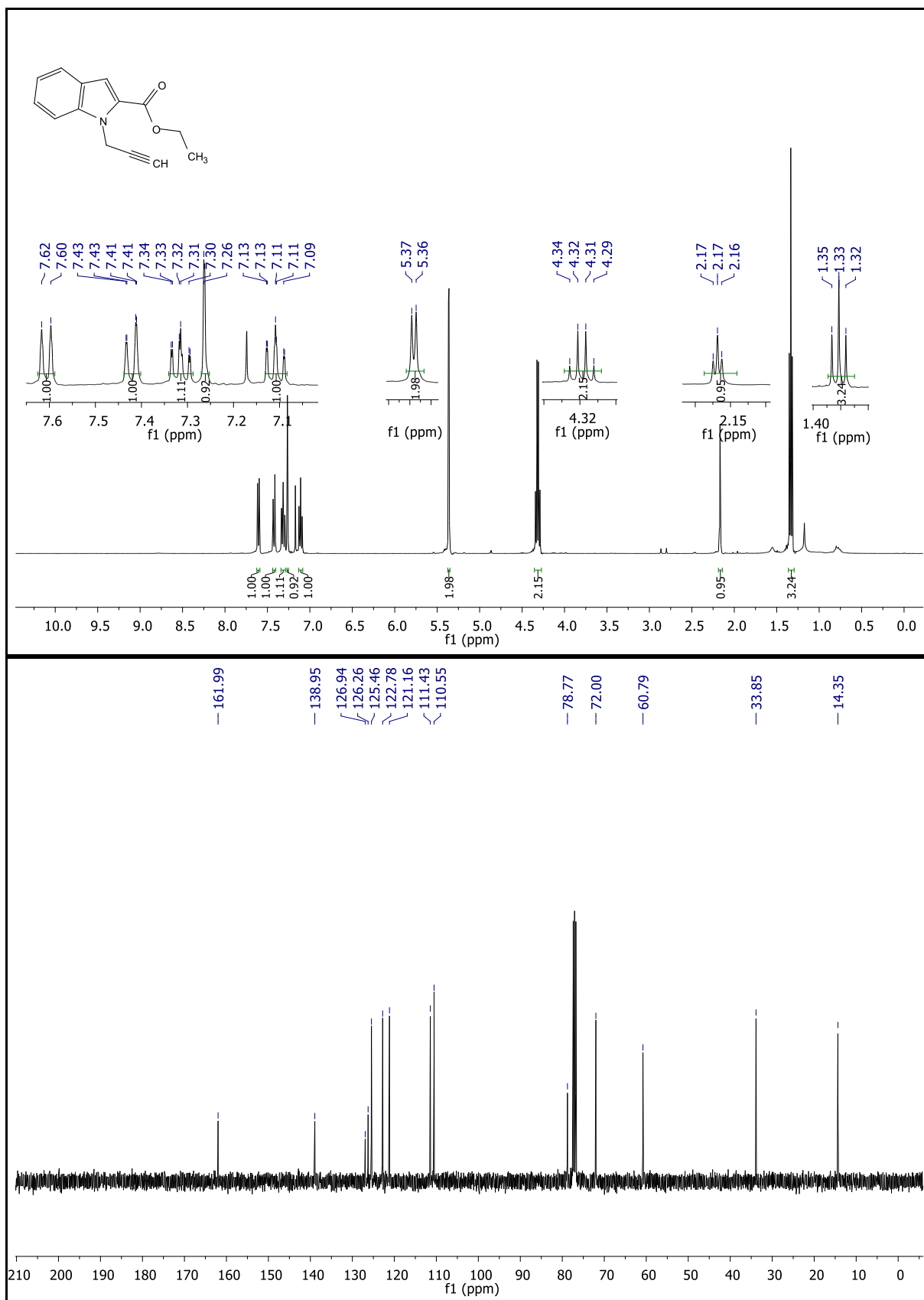


Figure 26: ^1H and ^{13}C NMR Spectra of **36** in CDCl_3

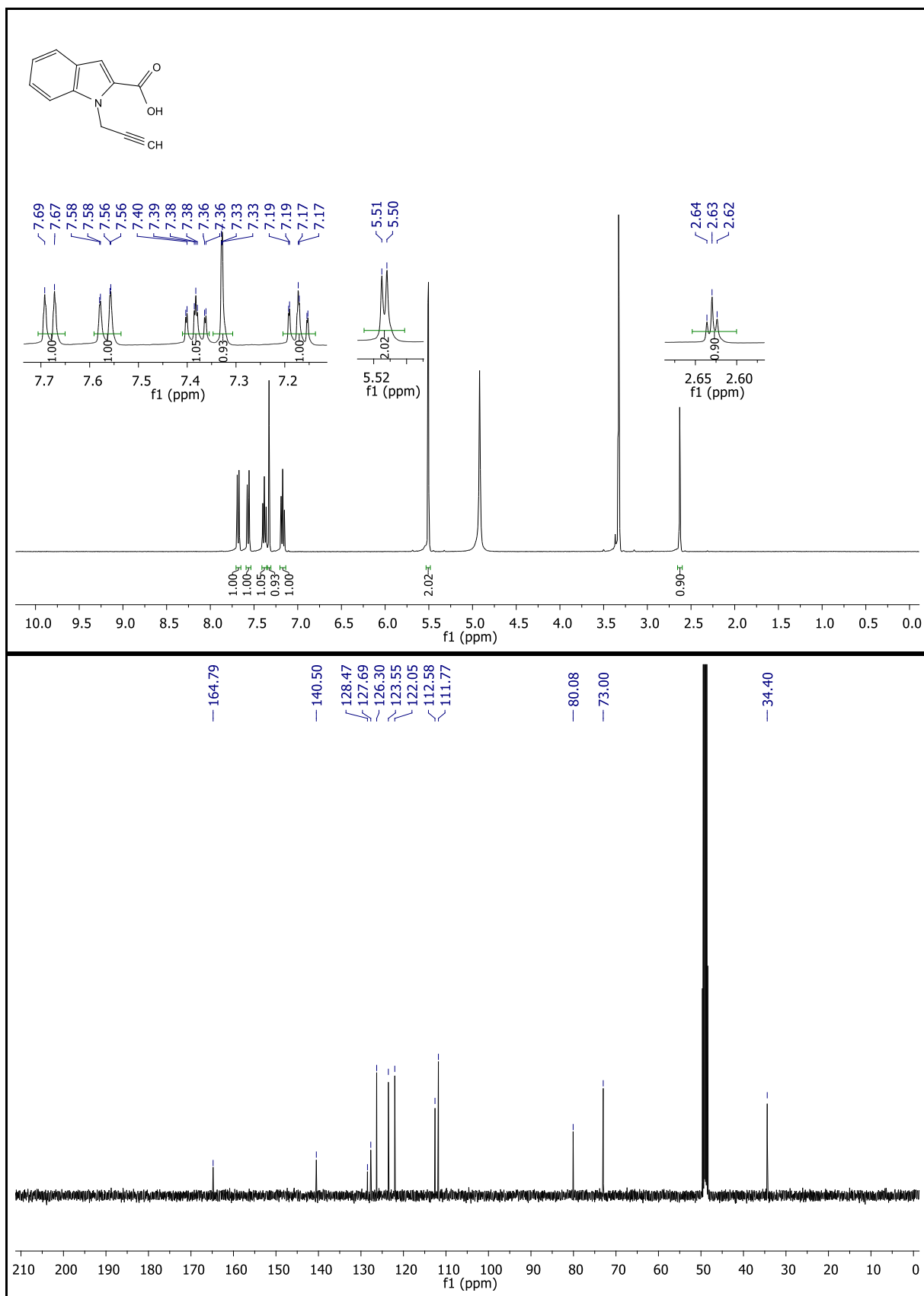


Figure 27: ^1H and ^{13}C NMR Spectra of **37** in CD $_3$ OD

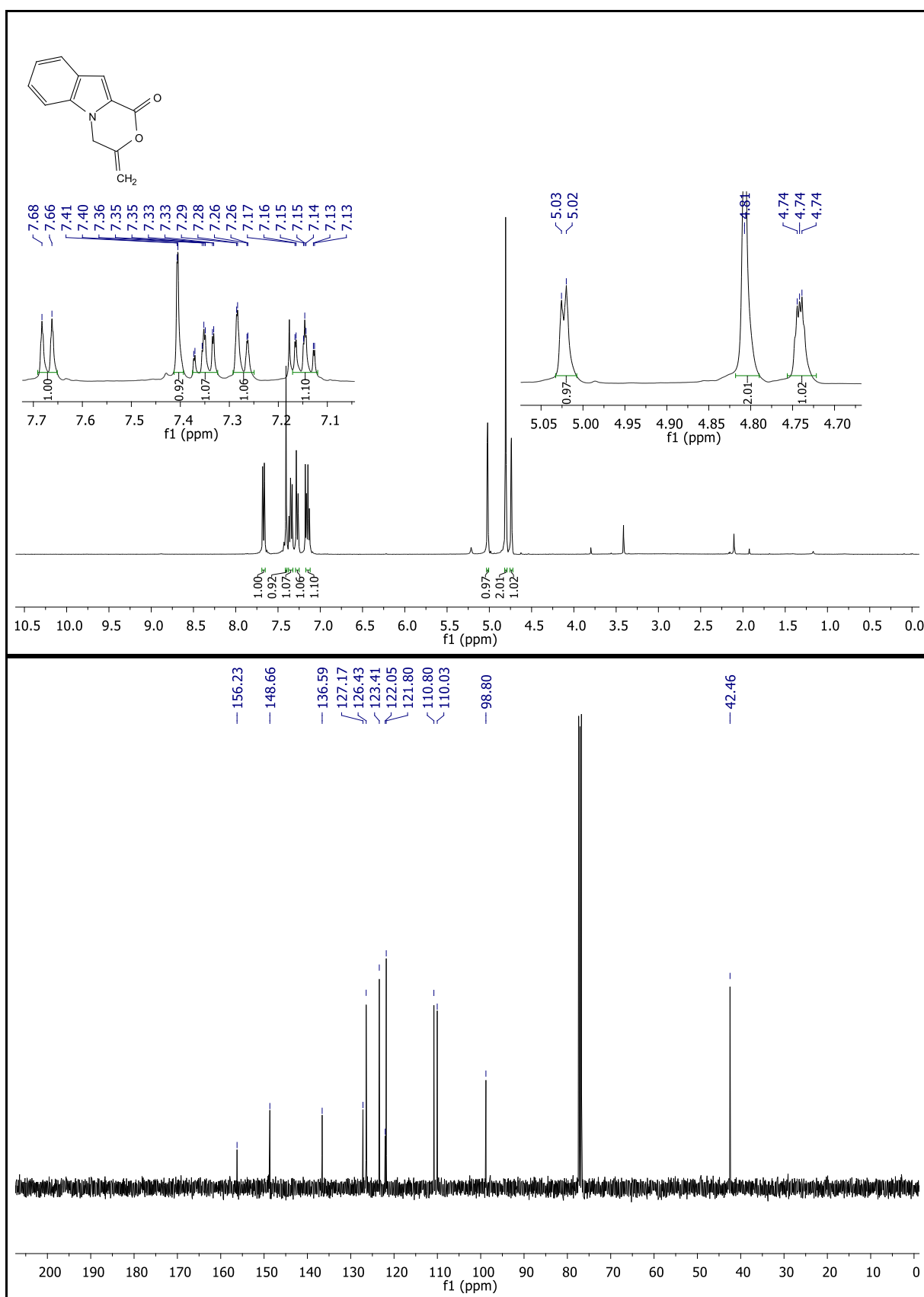


Figure 28: ¹H and ¹³C NMR Spectra of **38** in CDCl₃

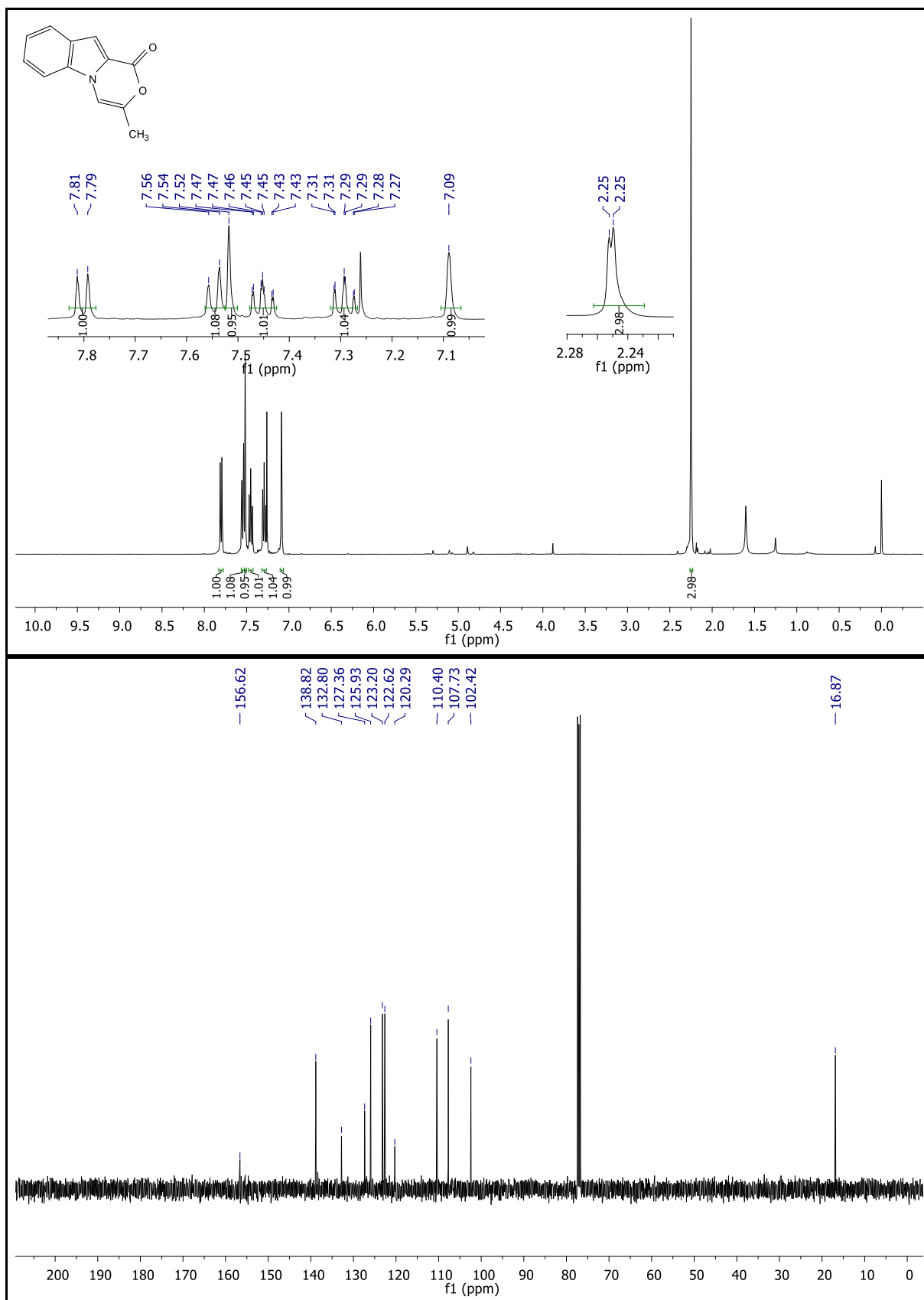


Figure 29: ^1H and ^{13}C NMR Spectra of **39** in CDCl_3

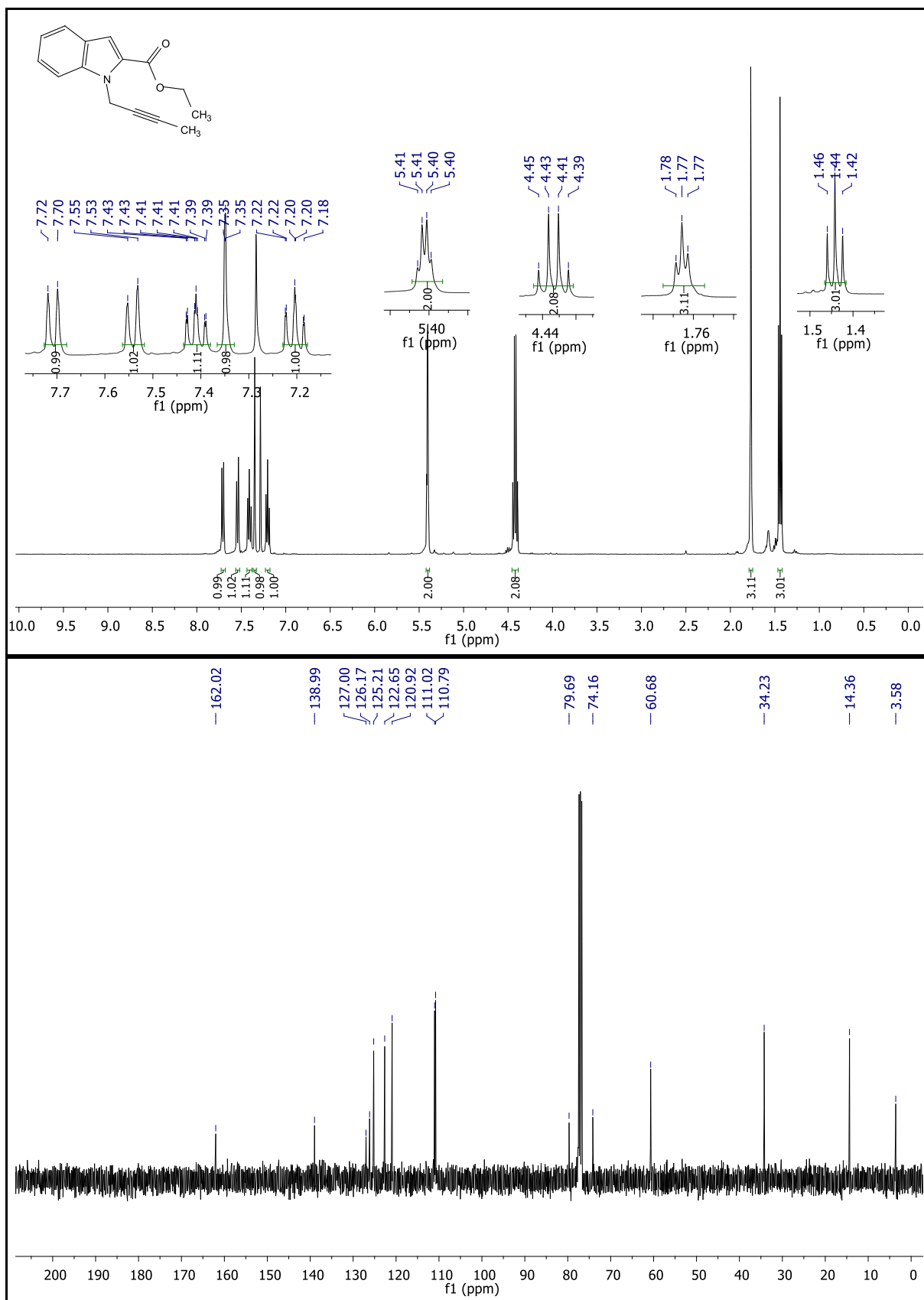


Figure 30: ¹H and ¹³C NMR Spectra of **40** in CDCl₃

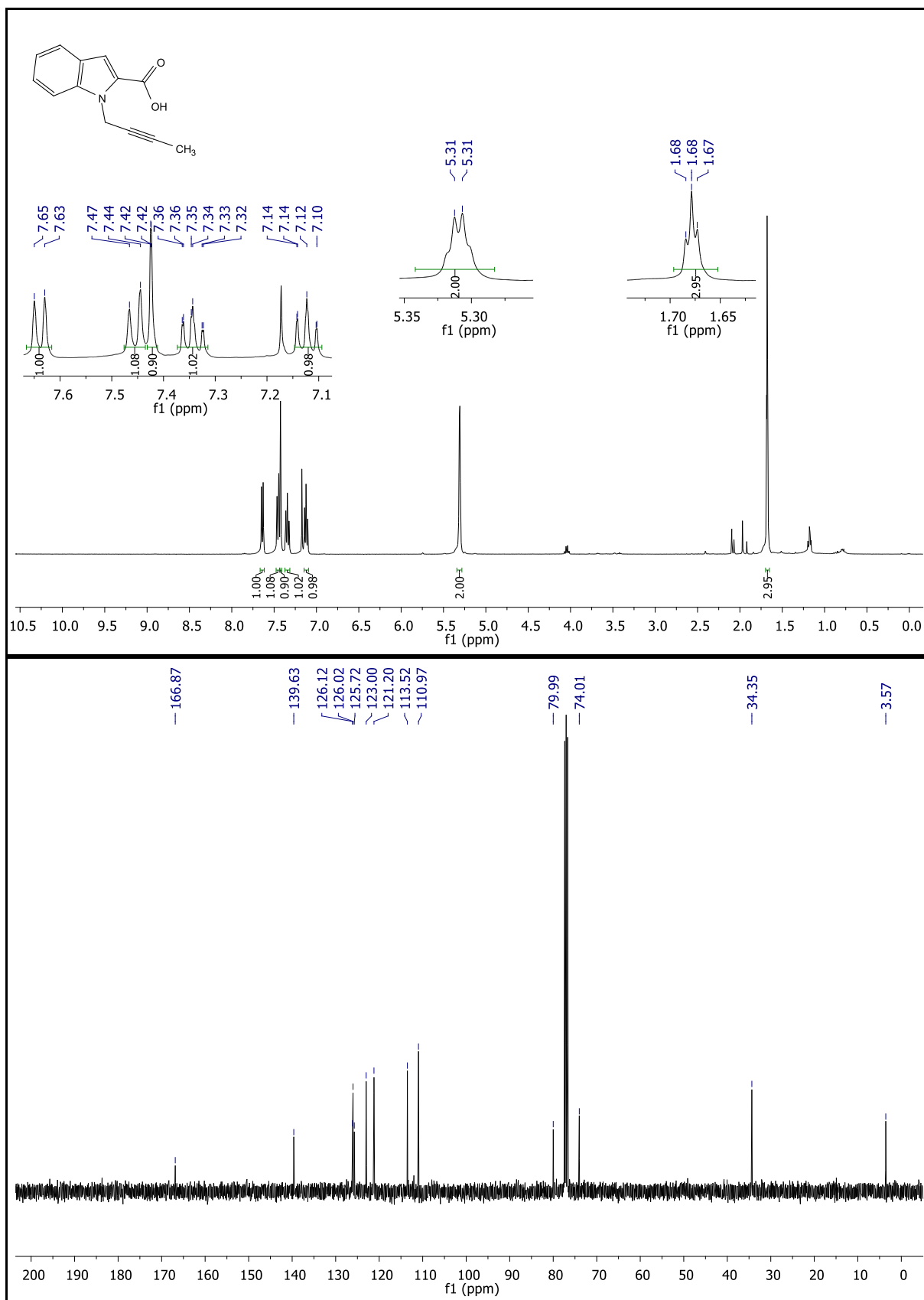


Figure 31: ¹H and ¹³C NMR Spectra of **41** in CDCl₃

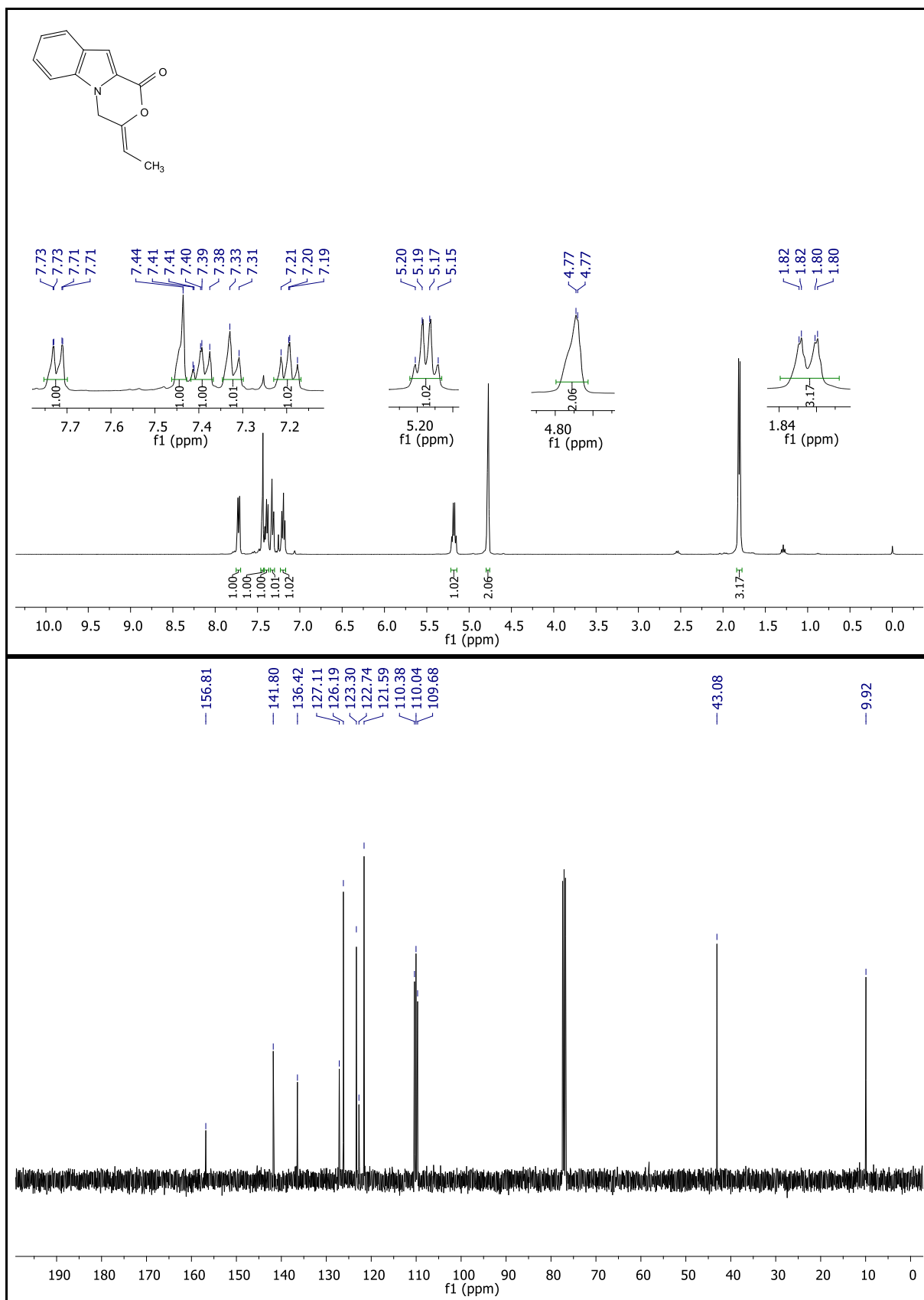


Figure 32: ¹H and ¹³C NMR Spectra of **42** in CDCl₃

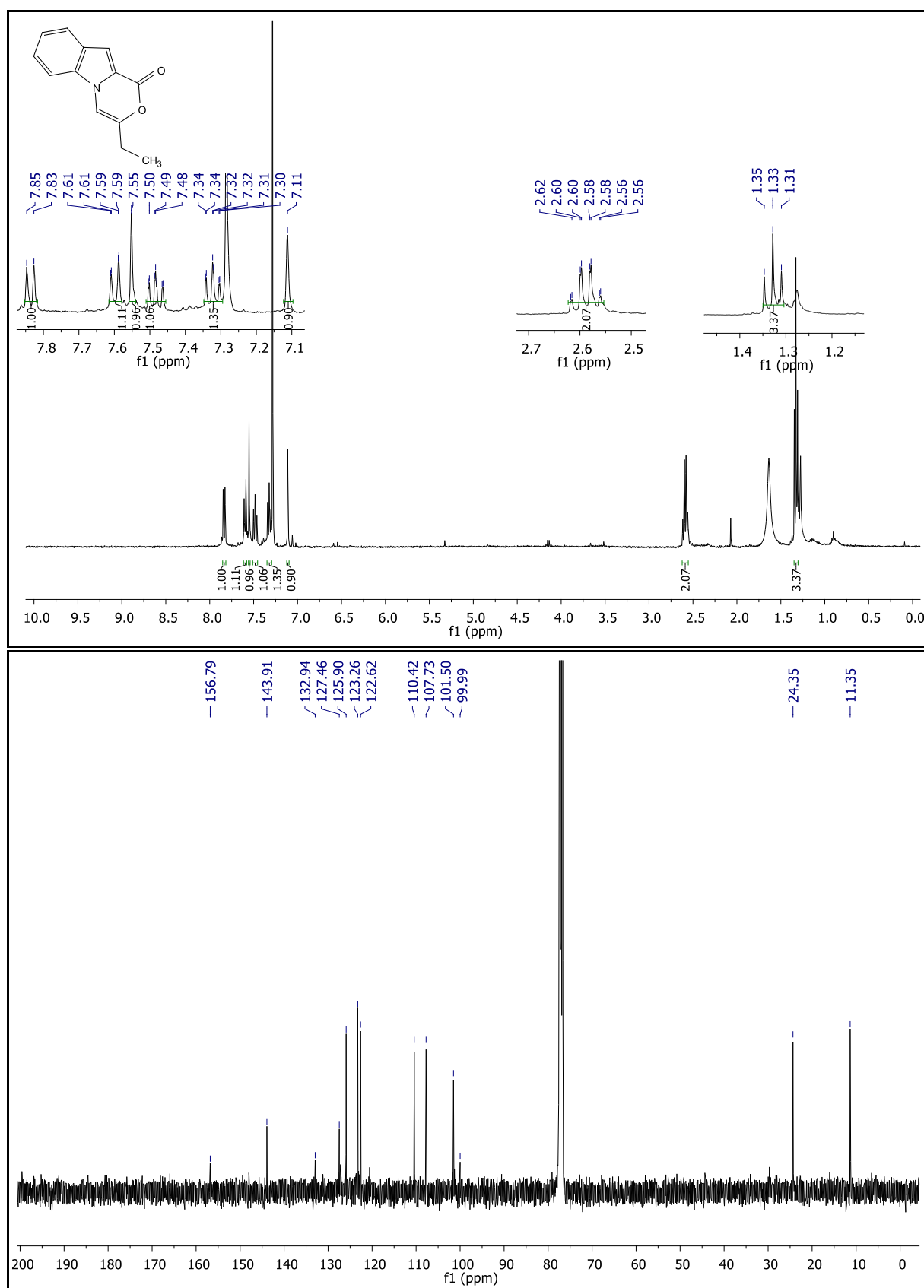


Figure 33: ¹H and ¹³C NMR Spectra of **43** in CDCl₃

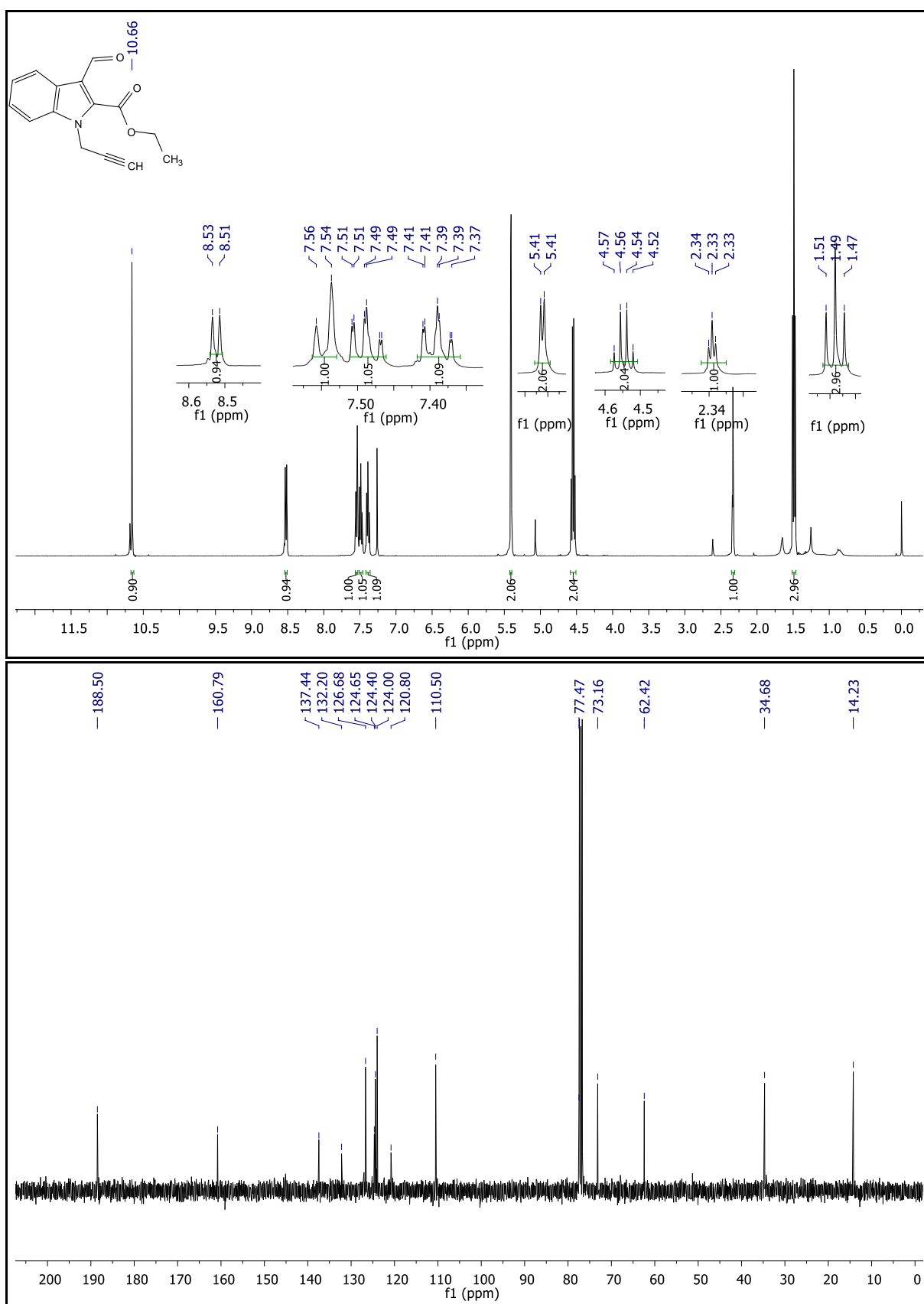


Figure 34: ^1H and ^{13}C NMR Spectra of **44** in CDCl_3

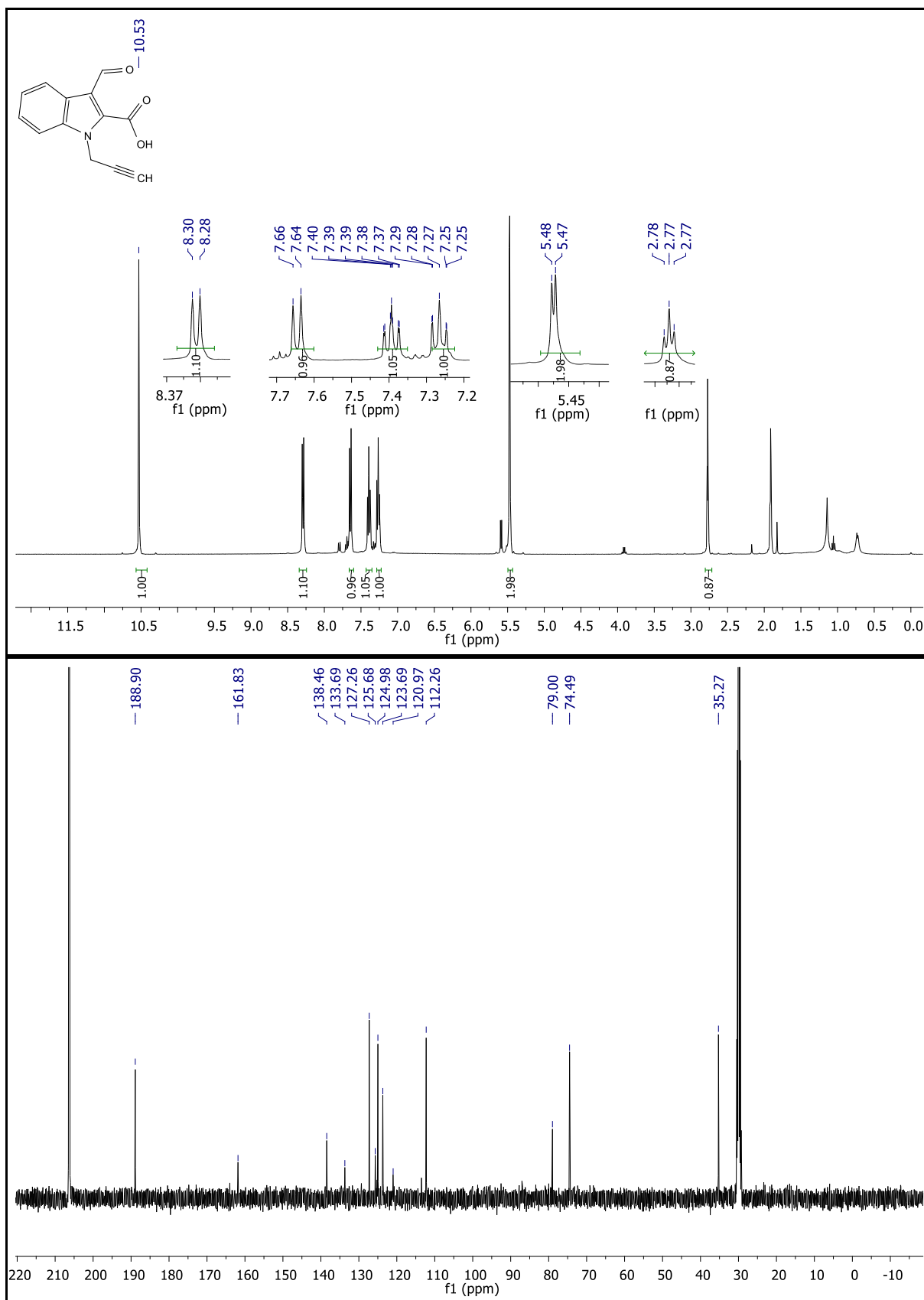


Figure 35: ¹H and ¹³C NMR Spectra of **45** in CD₃COCD₃

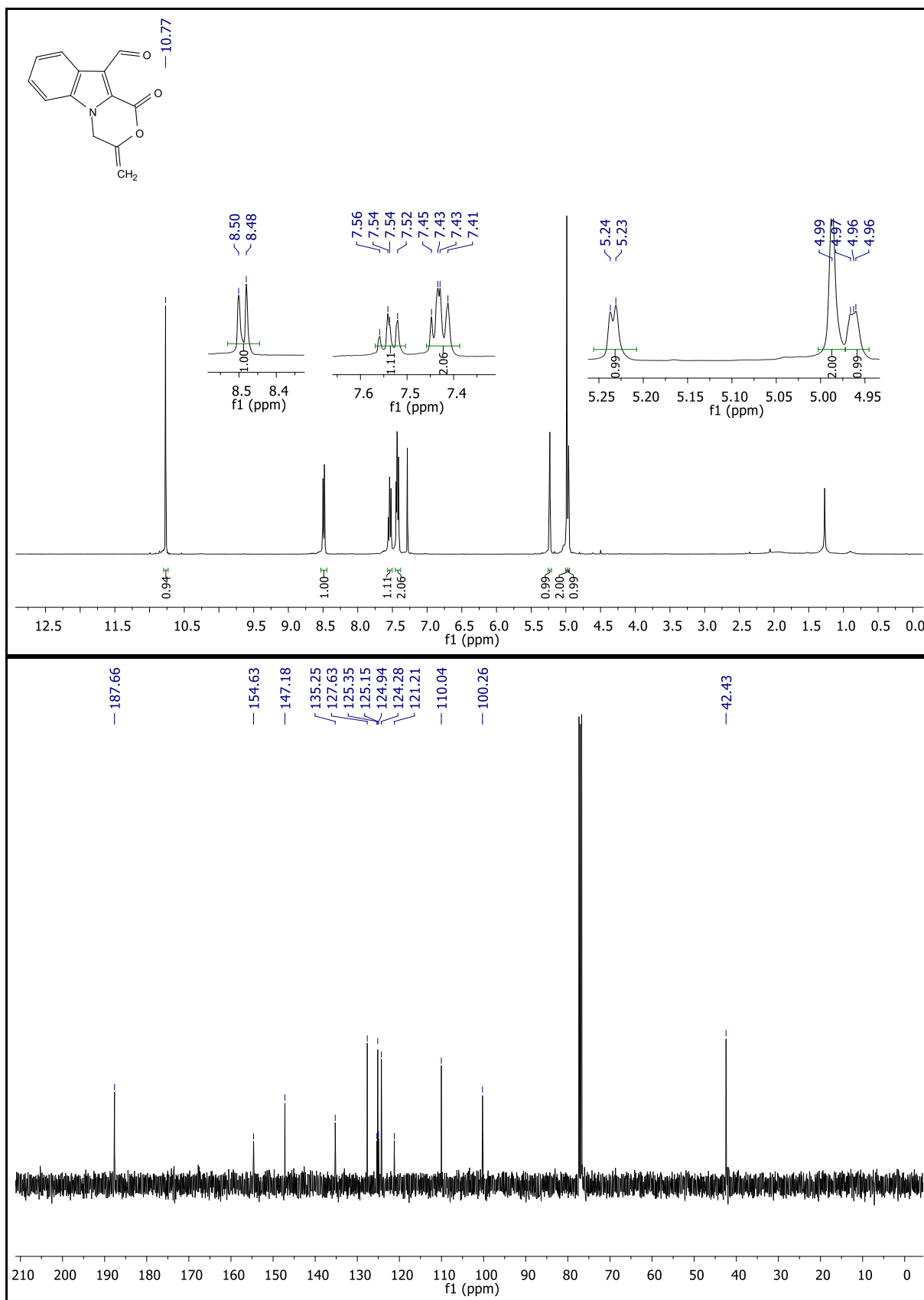


Figure 36: ¹H and ¹³C NMR Spectra of **46** in CDCl₃

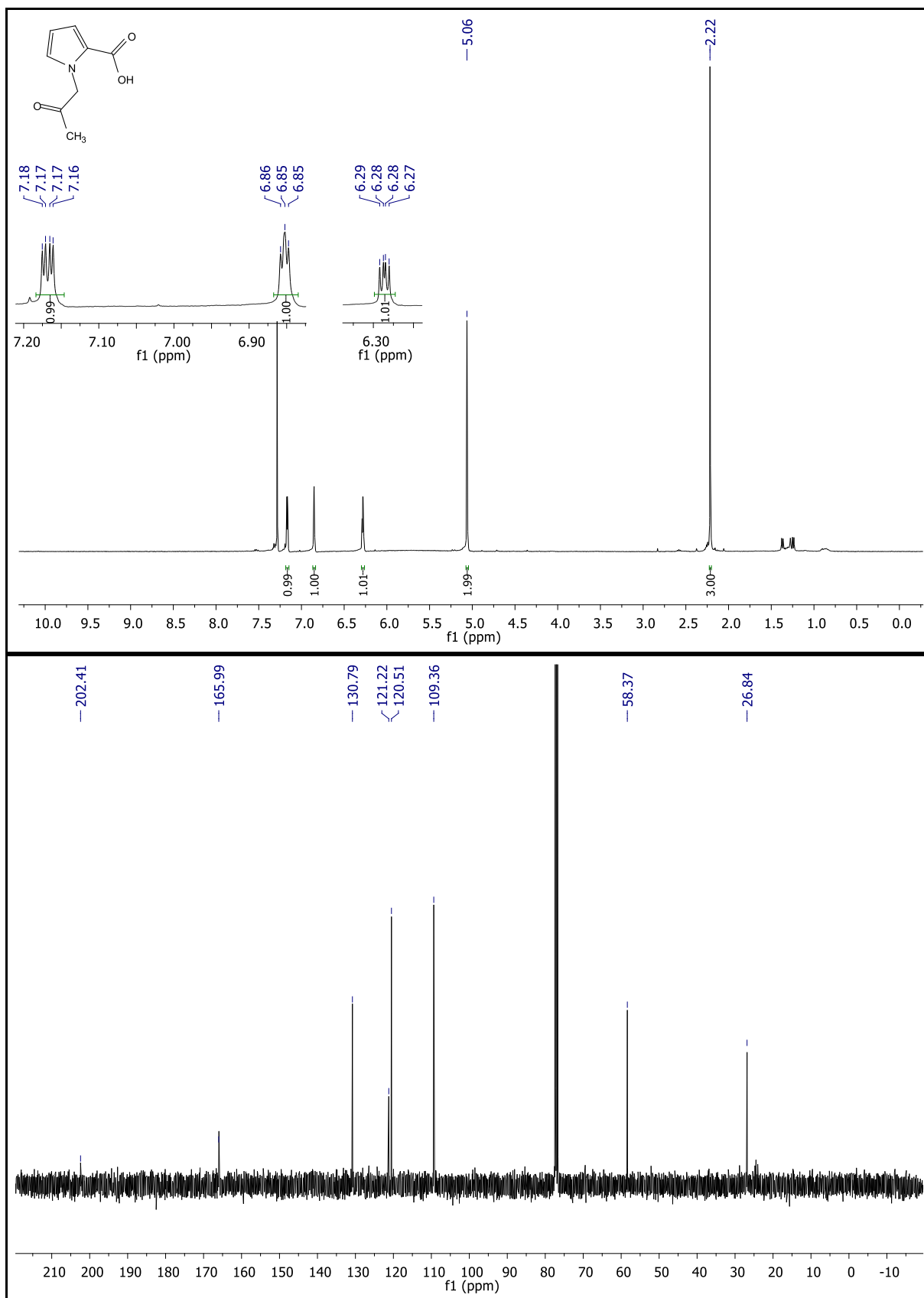


Figure 37: ¹H and ¹³C NMR Spectra of **48** in CDCl₃

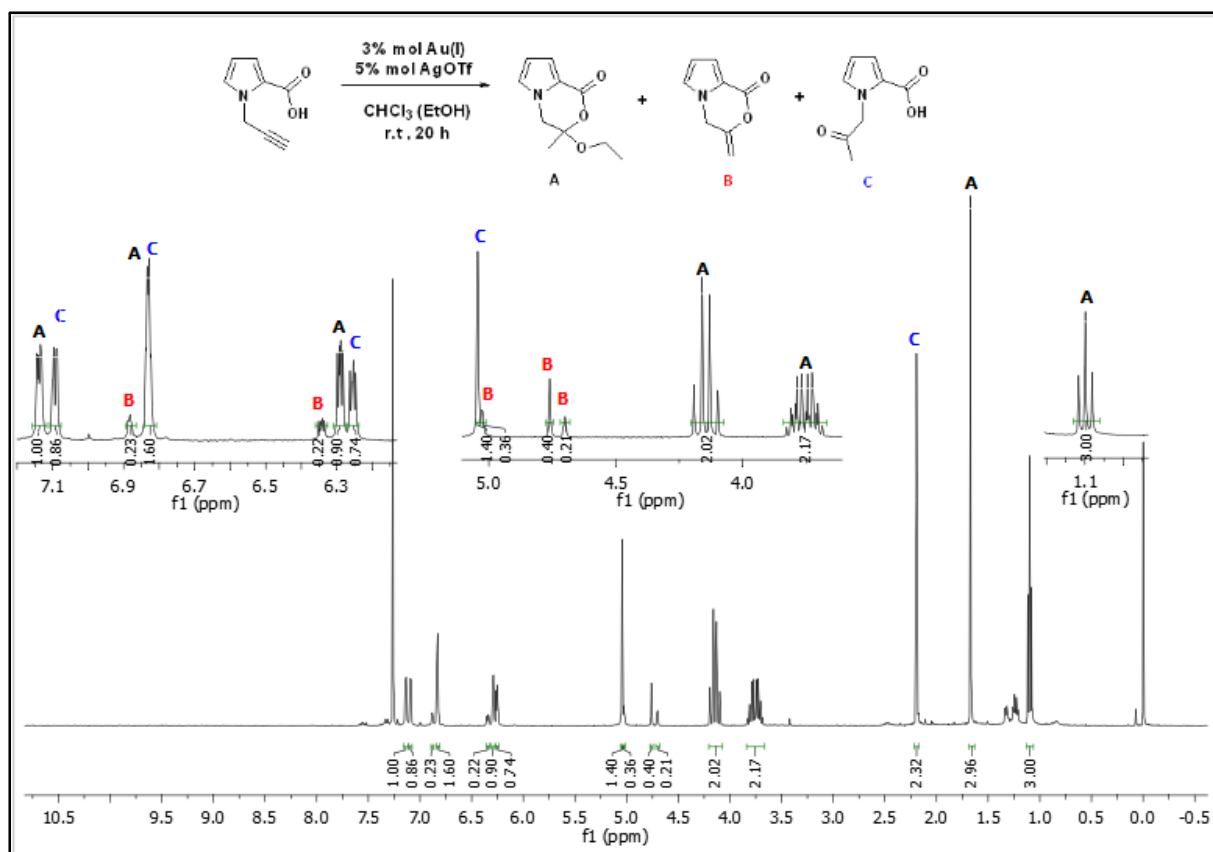


Figure 38: ¹H NMR Spectra of the reaction of **15** with gold(I) in chloroform in the presence of ethanol.

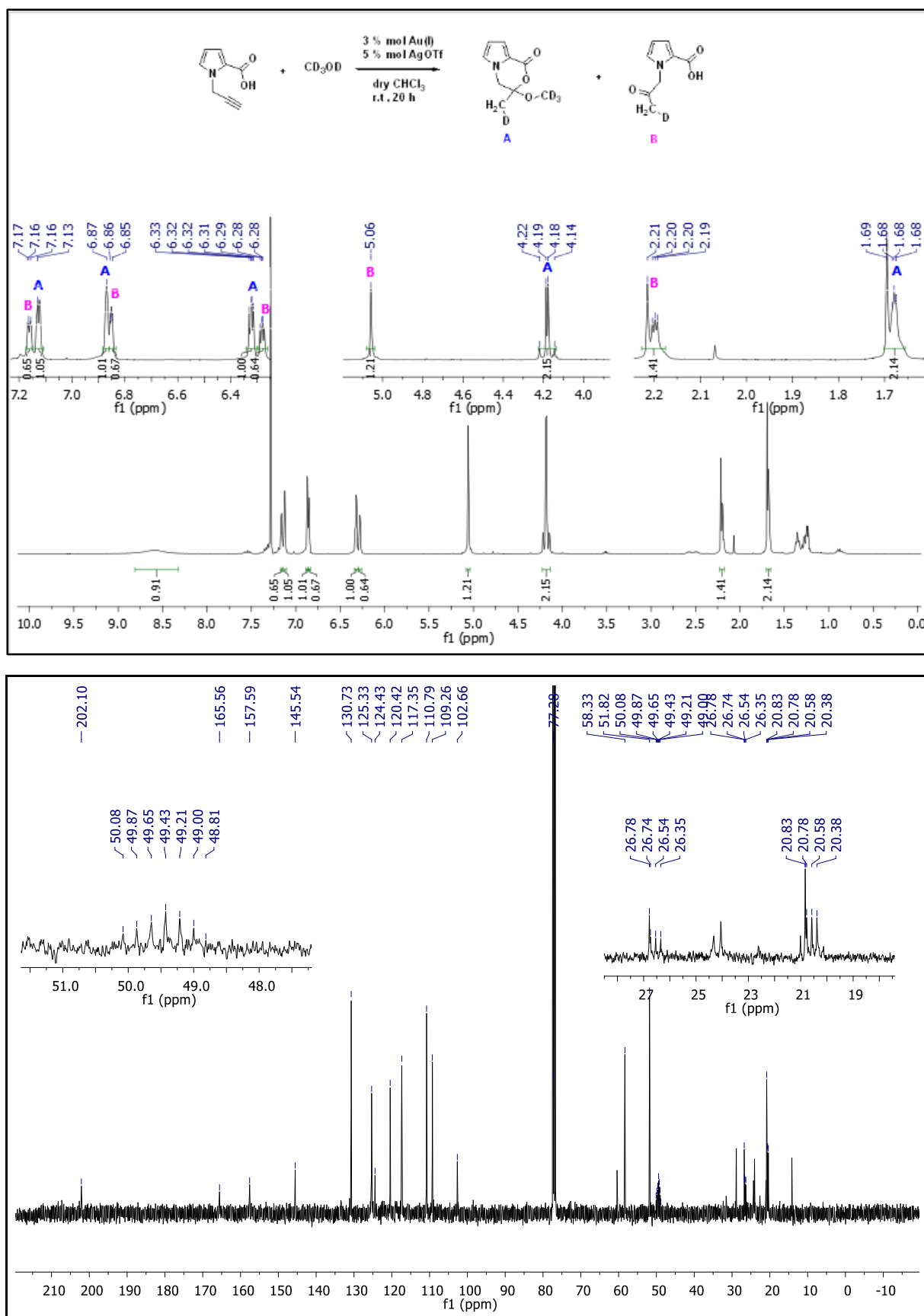


Figure 39: ^1H and ^{13}C NMR Spectra of the reaction of 15 with gold(I) in the presence of CD_3OD .

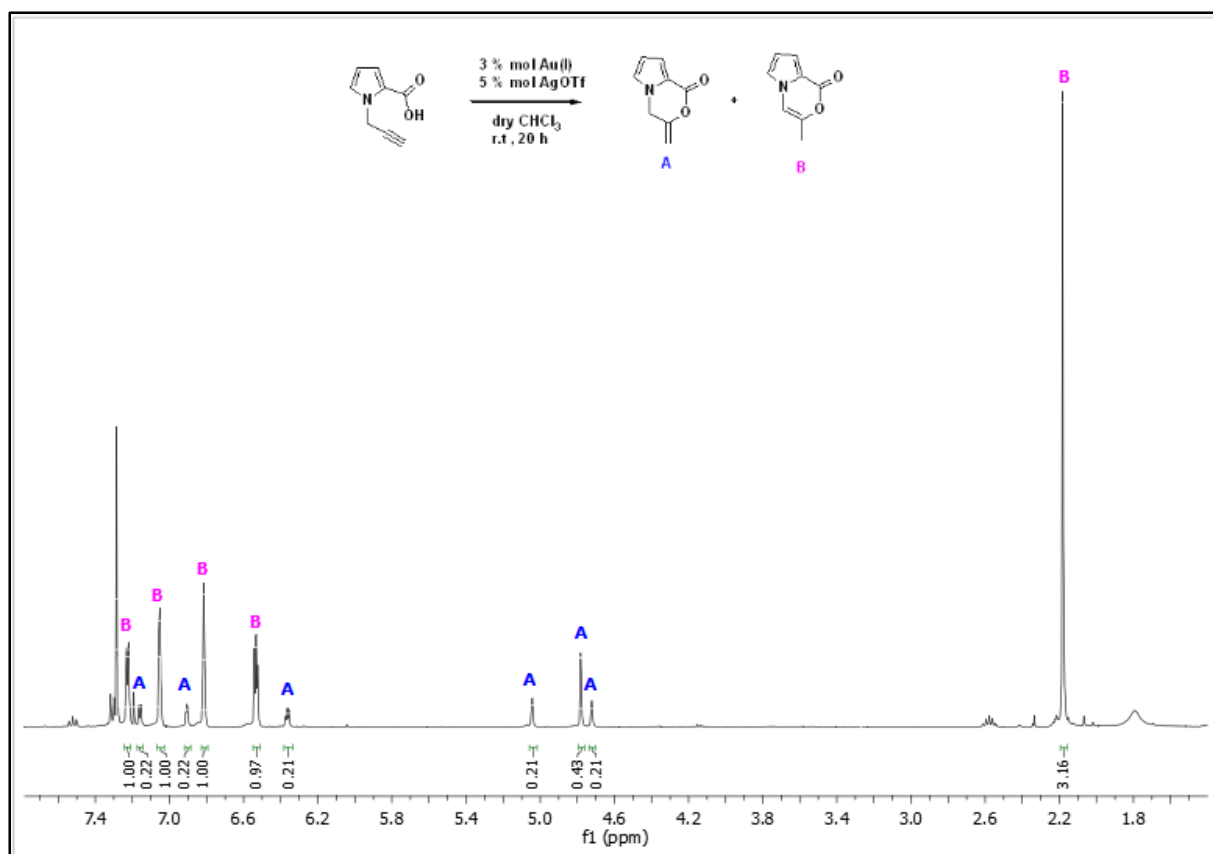


Figure 40: ¹H NMR Spectra of the reaction of **15** with gold(I) in chloroform

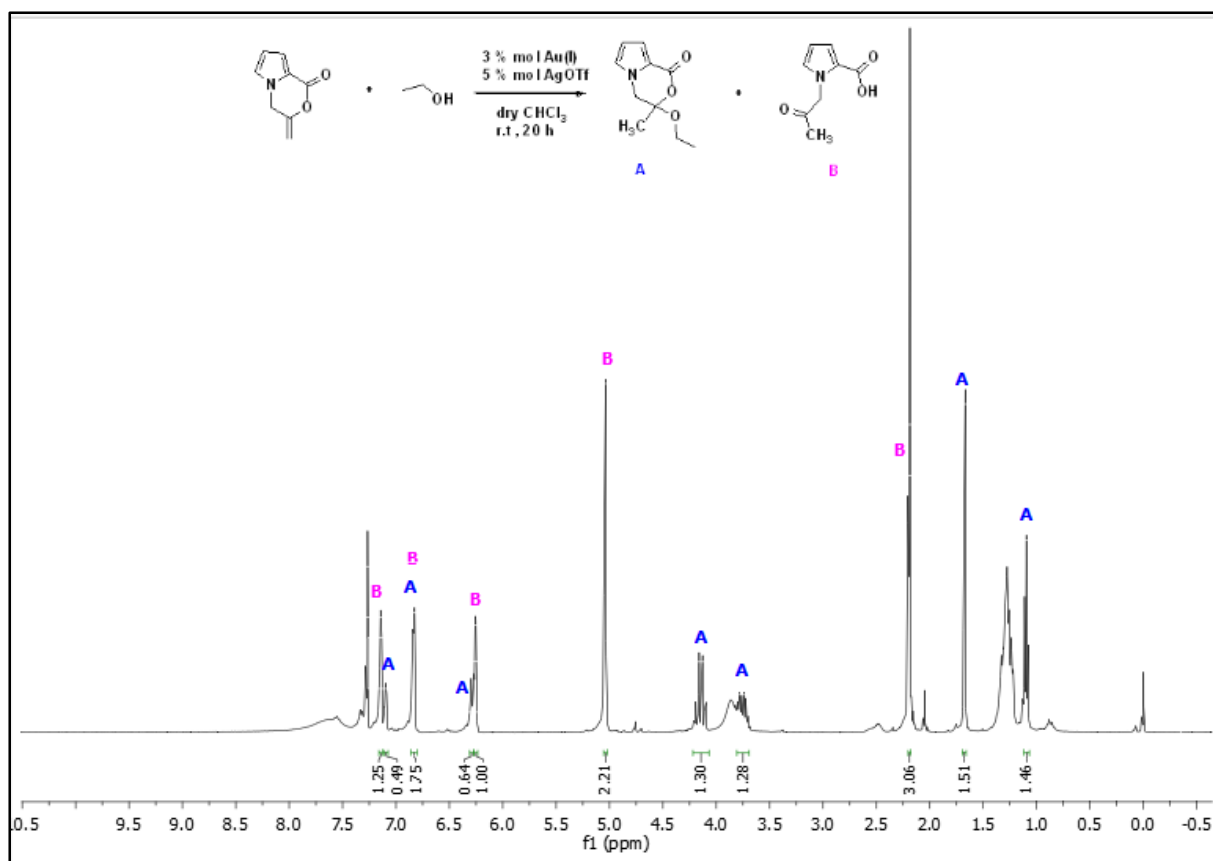


Figure 41: ¹H NMR Spectra of the reaction of **7** with gold(I) in the presence of EtOH

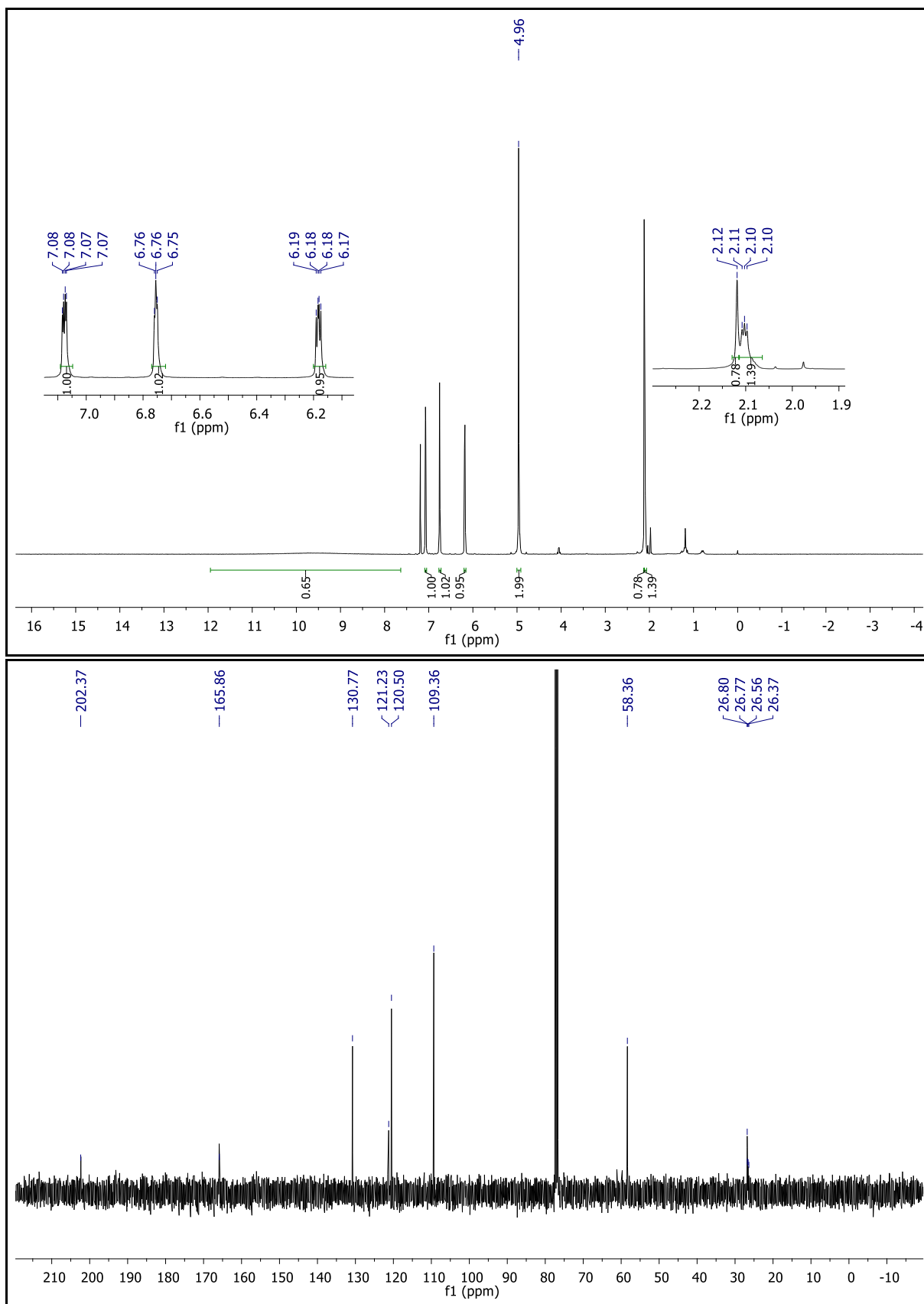


Figure 42: ^1H and ^{13}C NMR Spectra of **50a** and **50b** in CDCl_3