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Benzosulfones as Photochemically Activated Sulfur Dioxide (SO_2) Donors

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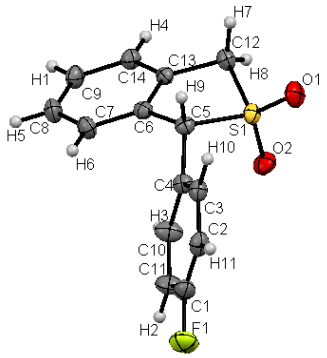
X-ray datafor 12h: $C_{14}H_{11}FO_2S$; Compound **12h** was crystallized from diethyl ether at room temperature. A colorless rectangular shaped crystal with approximate dimensions 0.302 x 0.210 x 0.052 mm gave monoclinic crystal with space group P21/c; *a* = a=11.4383(13) *b* = b=11.6596(15) *c* = 9.4849(12) Å, α = 90° β = 104.523(3)° γ = 90°; *V* = 1224.5(3) Å^3; *T* = 296 K ; *Z* = 4; ρ_{calc}= 1.423 Mgm^{-3}; $2\theta_{max}$= 56.70°; *MoKαλ* = 0.71073 Å. Fine-focus sealed tube



source with graphite monochromator. *R* = 0.0341 (for 2601 reflection *I*>2σ *(I)*), *wR* = 0.1042 which was refined against ǀ*F2*ǀ and S = 1.491for 163 parameters and 3047 unique reflections. The structure was obtained by direct methods using SHELXS-97. All non-hydrogen atoms were refined isotropically. The hydrogen atoms were fixed geometrically in the idealized position and refined in the final cycle of refinement as riding over the atoms to which they are bonded. μ = 0.267 mm^{-1}. **CCDC No.: 907013**.

Spectral Data:

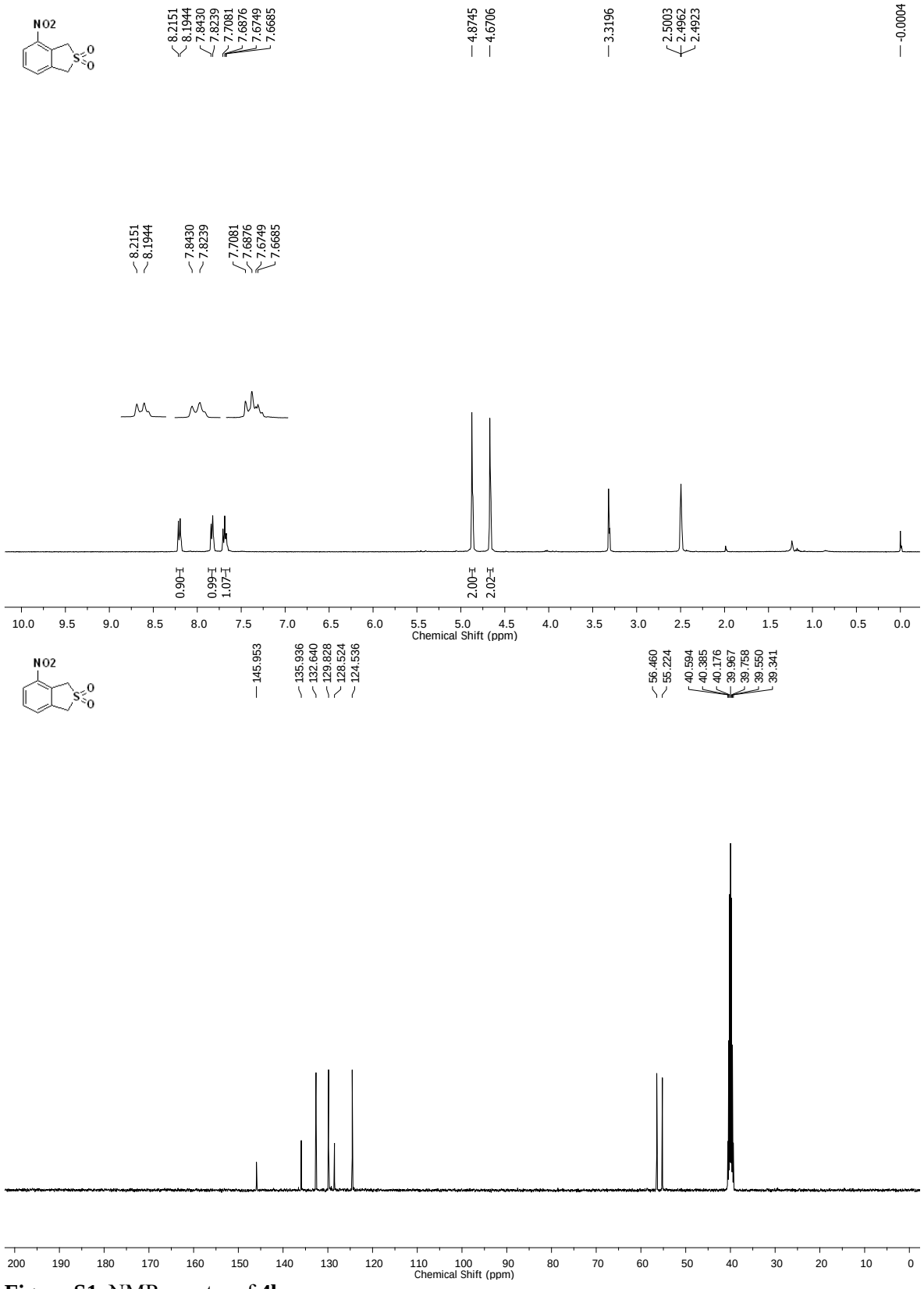


Figure S1. NMR spectra of **4b**

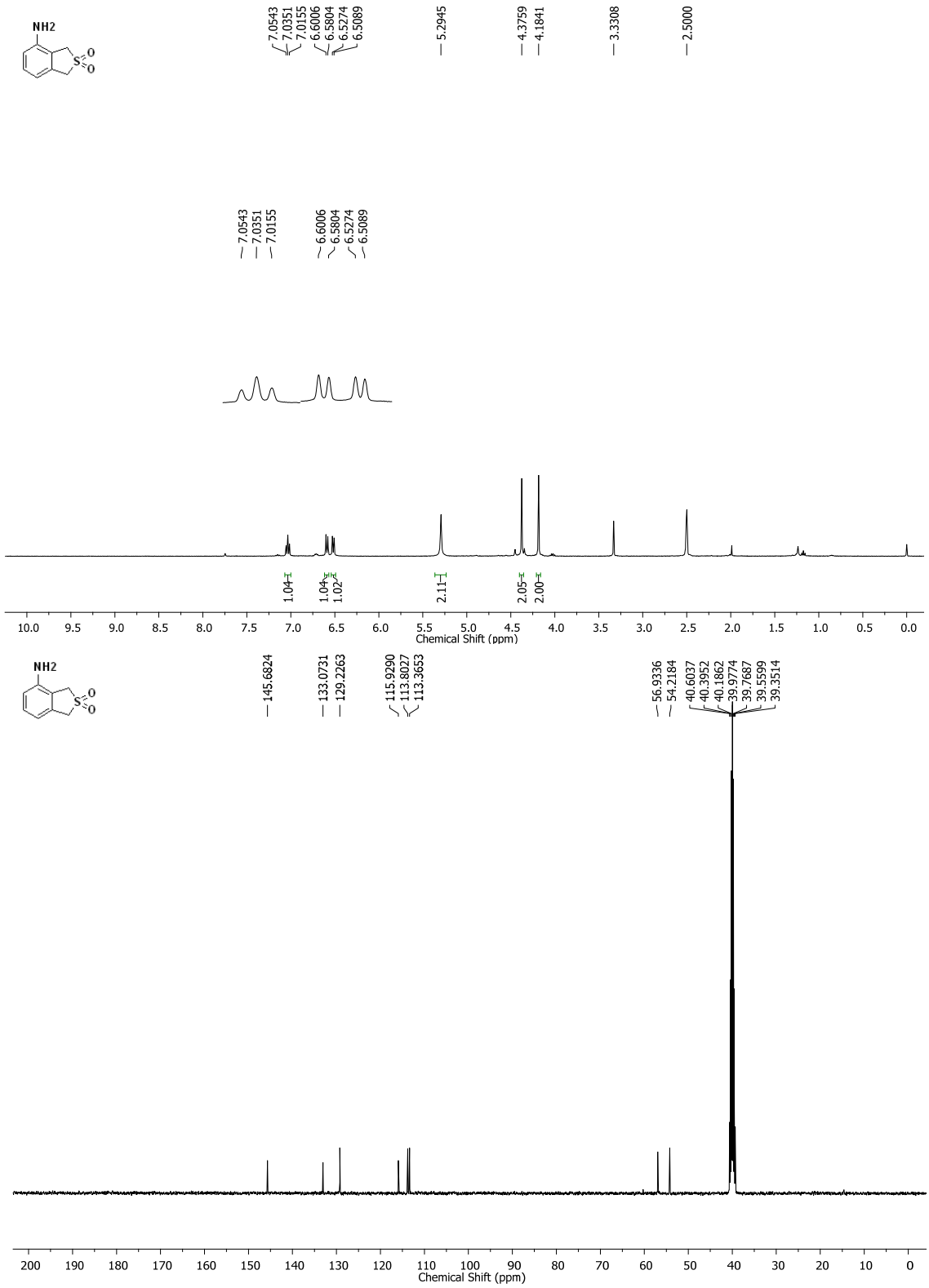


Figure S2. NMR spectra of **5a**

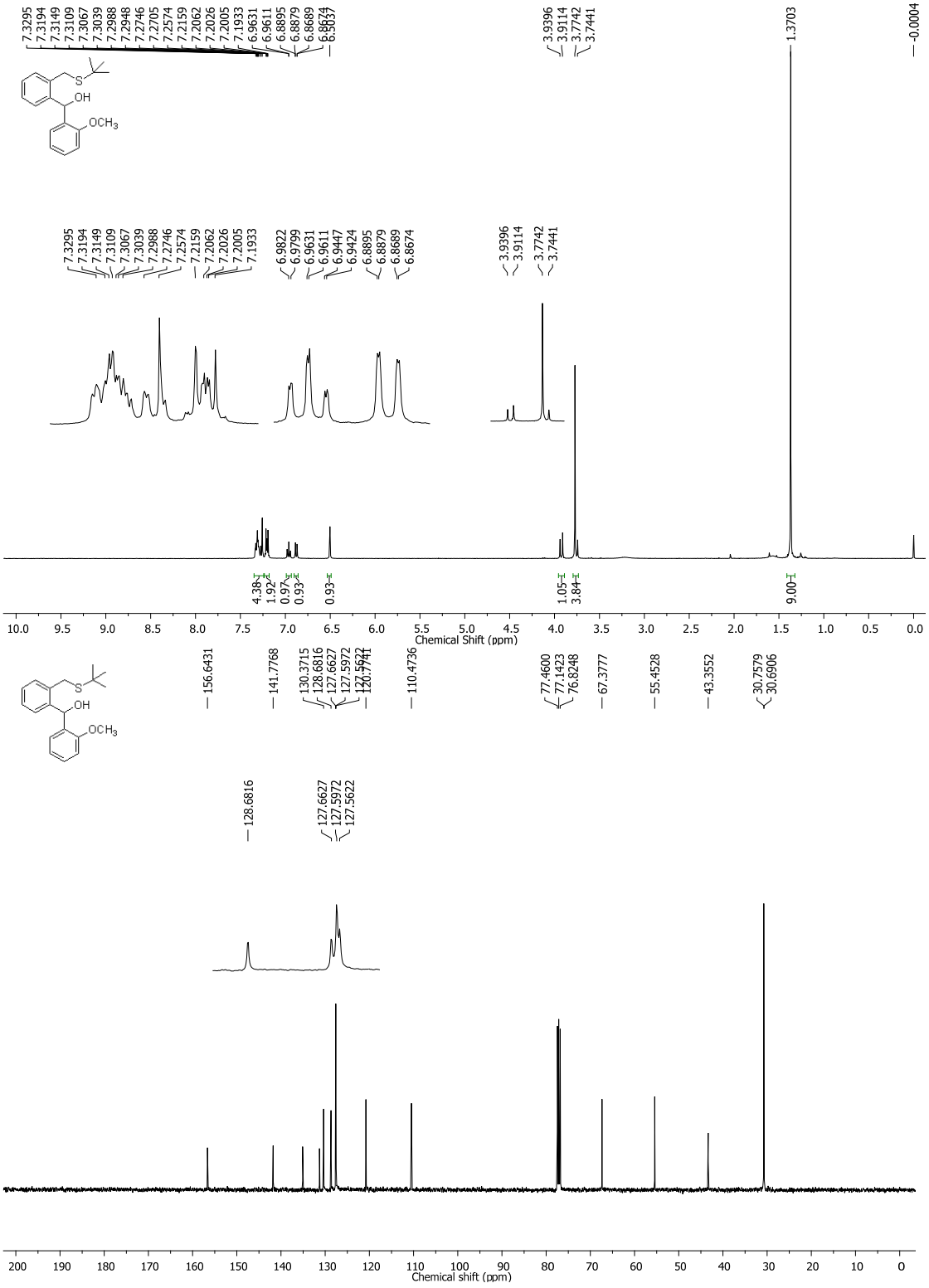


Figure S3. NMR spectra of **10b**

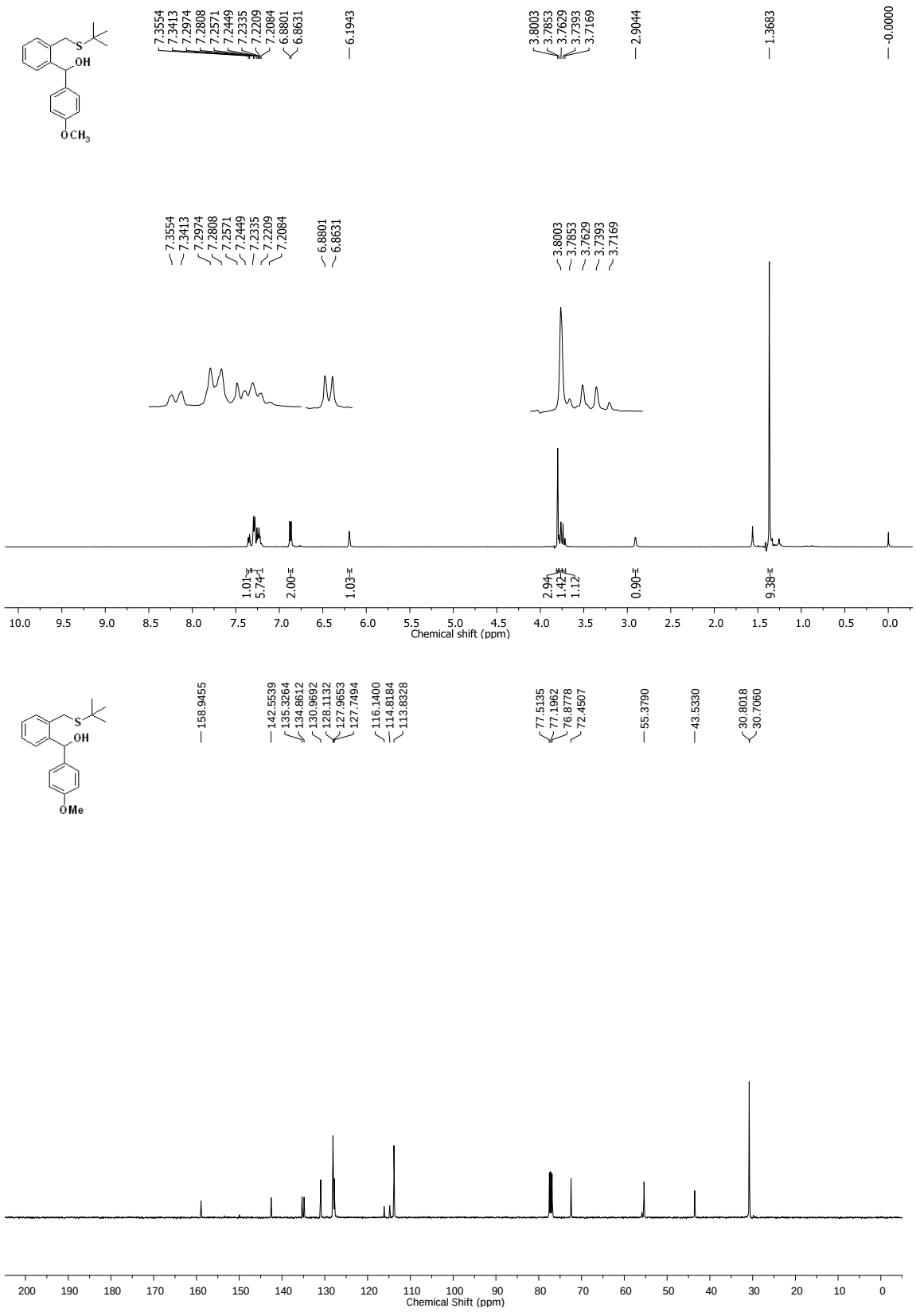


Figure S4. NMR spectra of **10f**

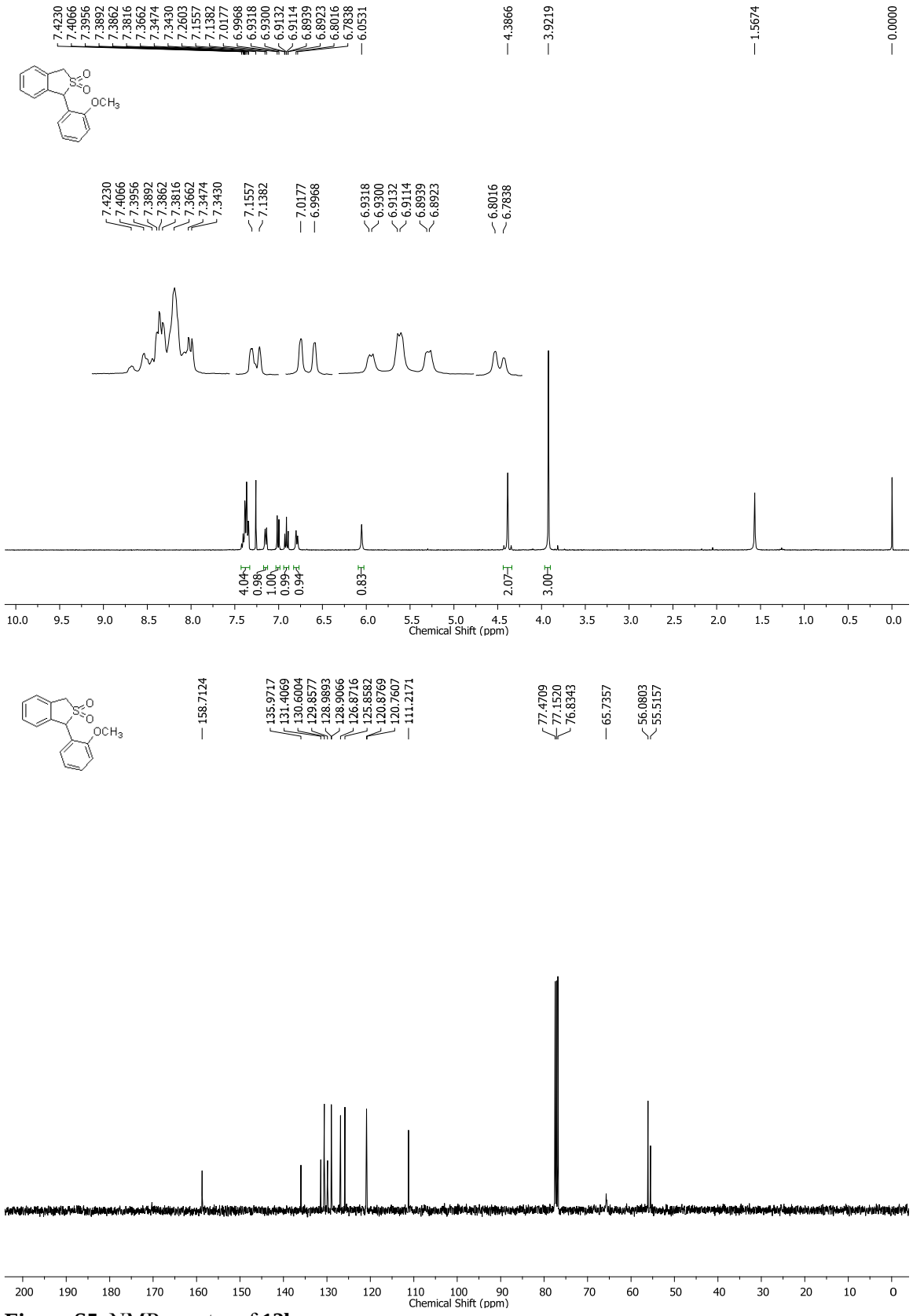


Figure S5. NMR spectra of **12b**

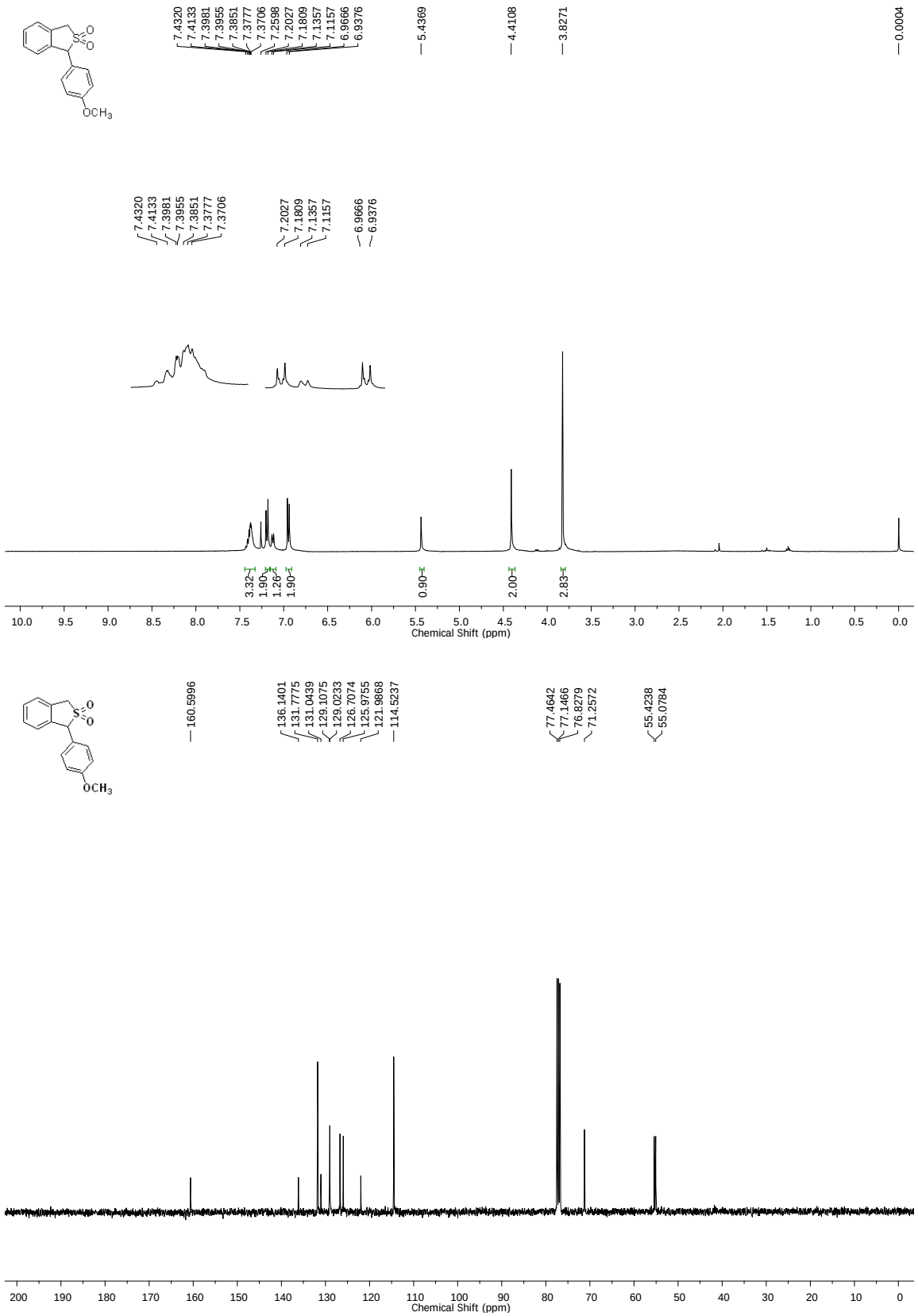


Figure S6. NMR spectra of **12f**

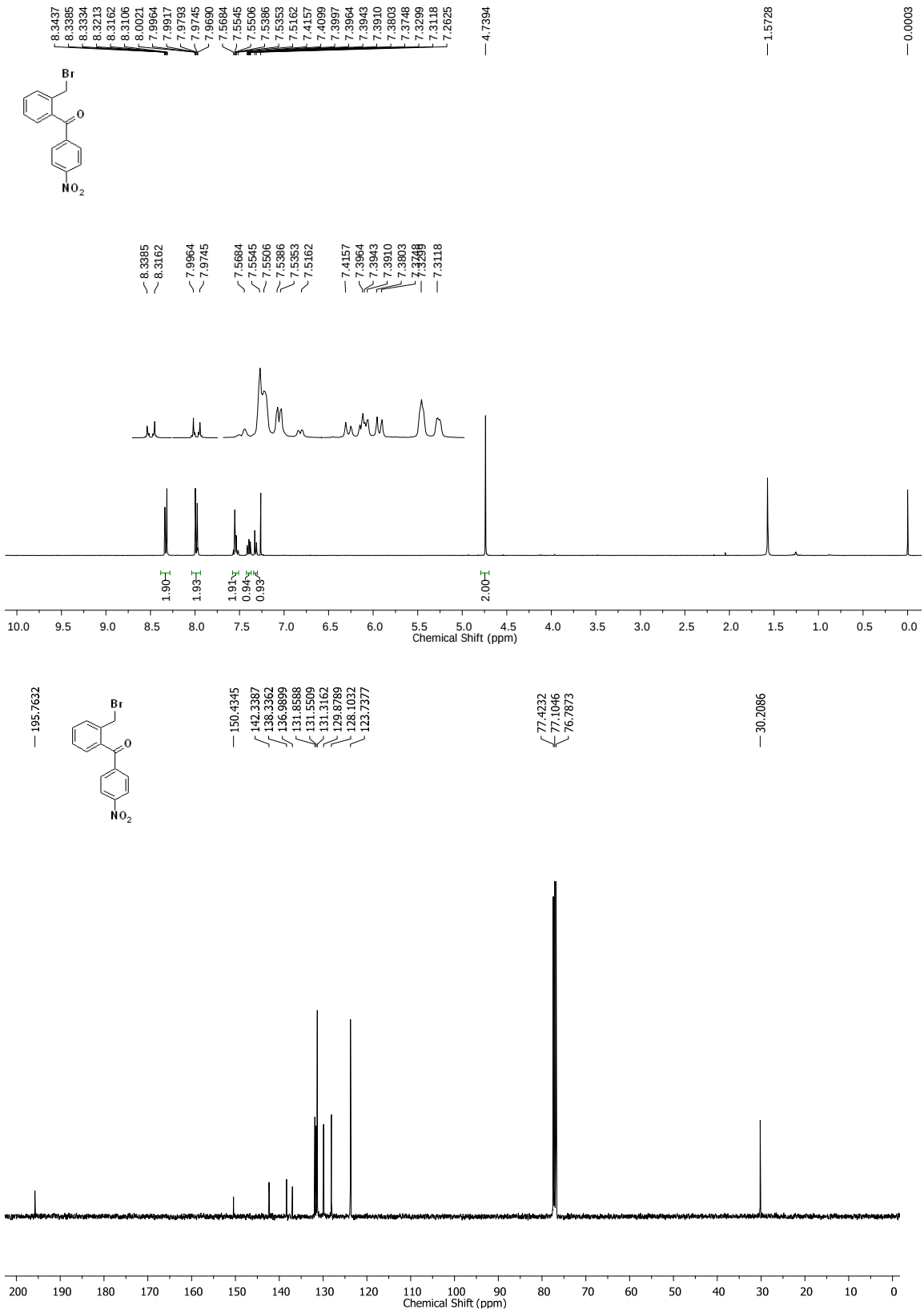


Figure S7. NMR spectra of **16**

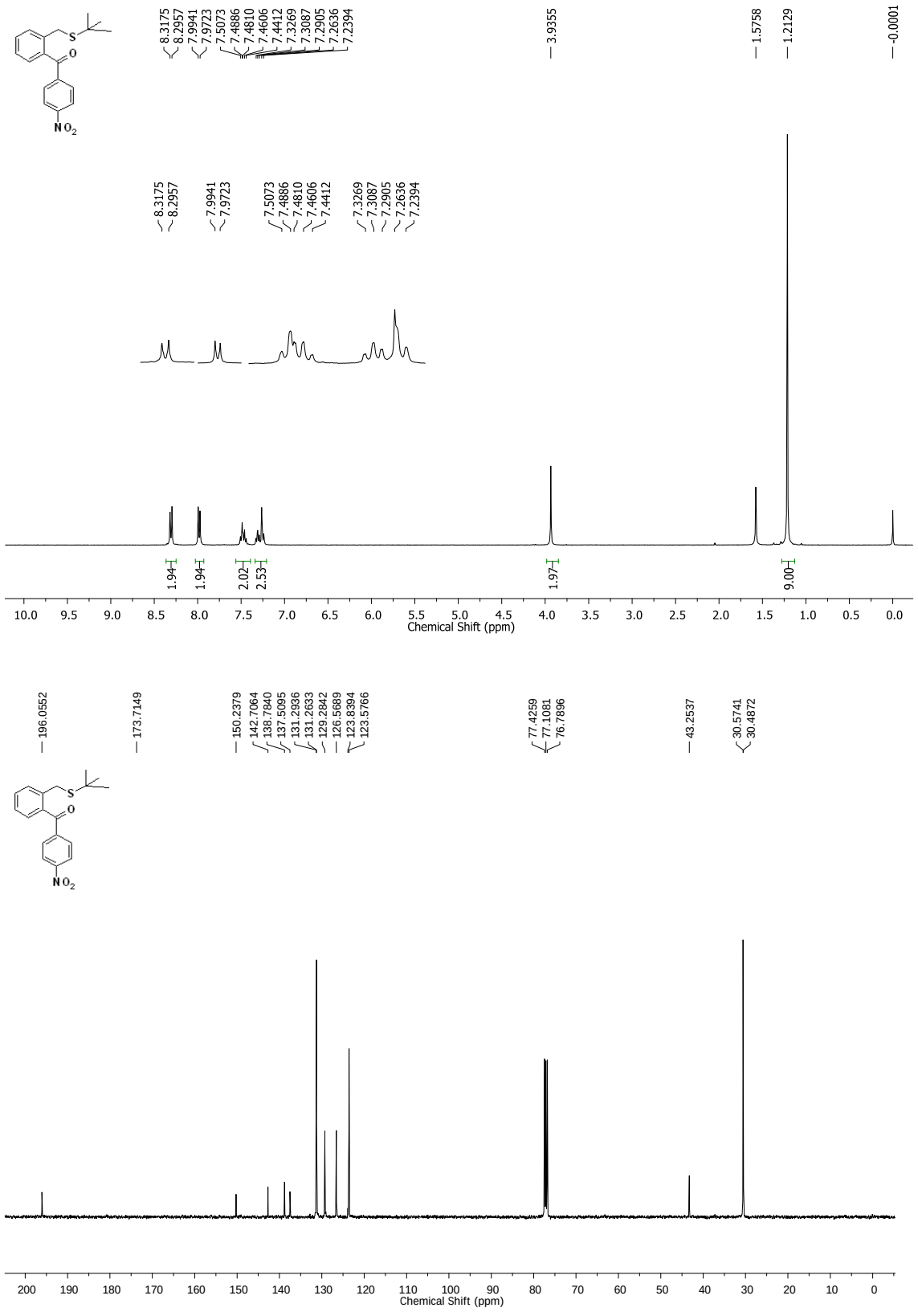


Figure S8. NMR spectra of **17**

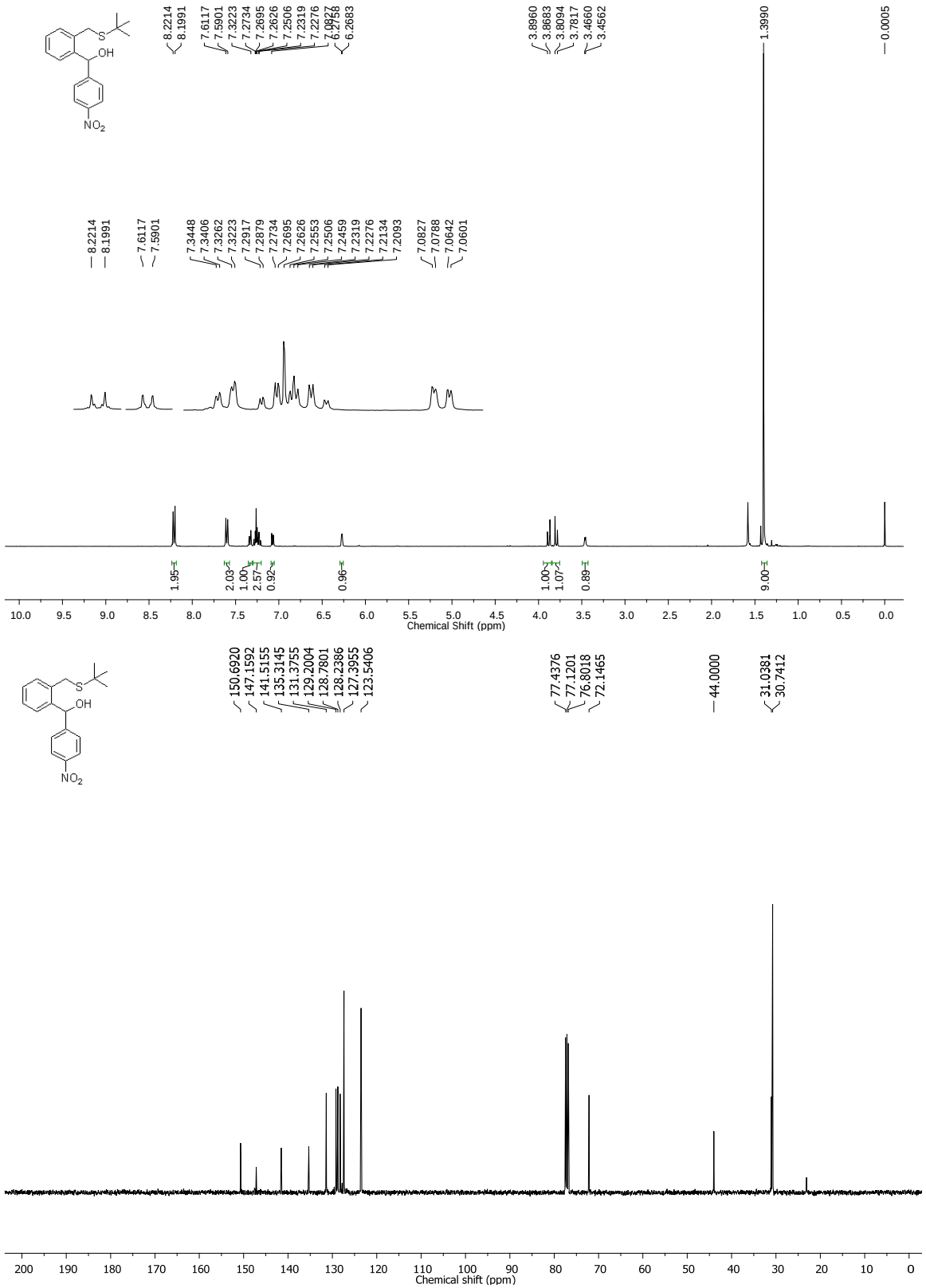


Figure S9. NMR spectra of **10j**

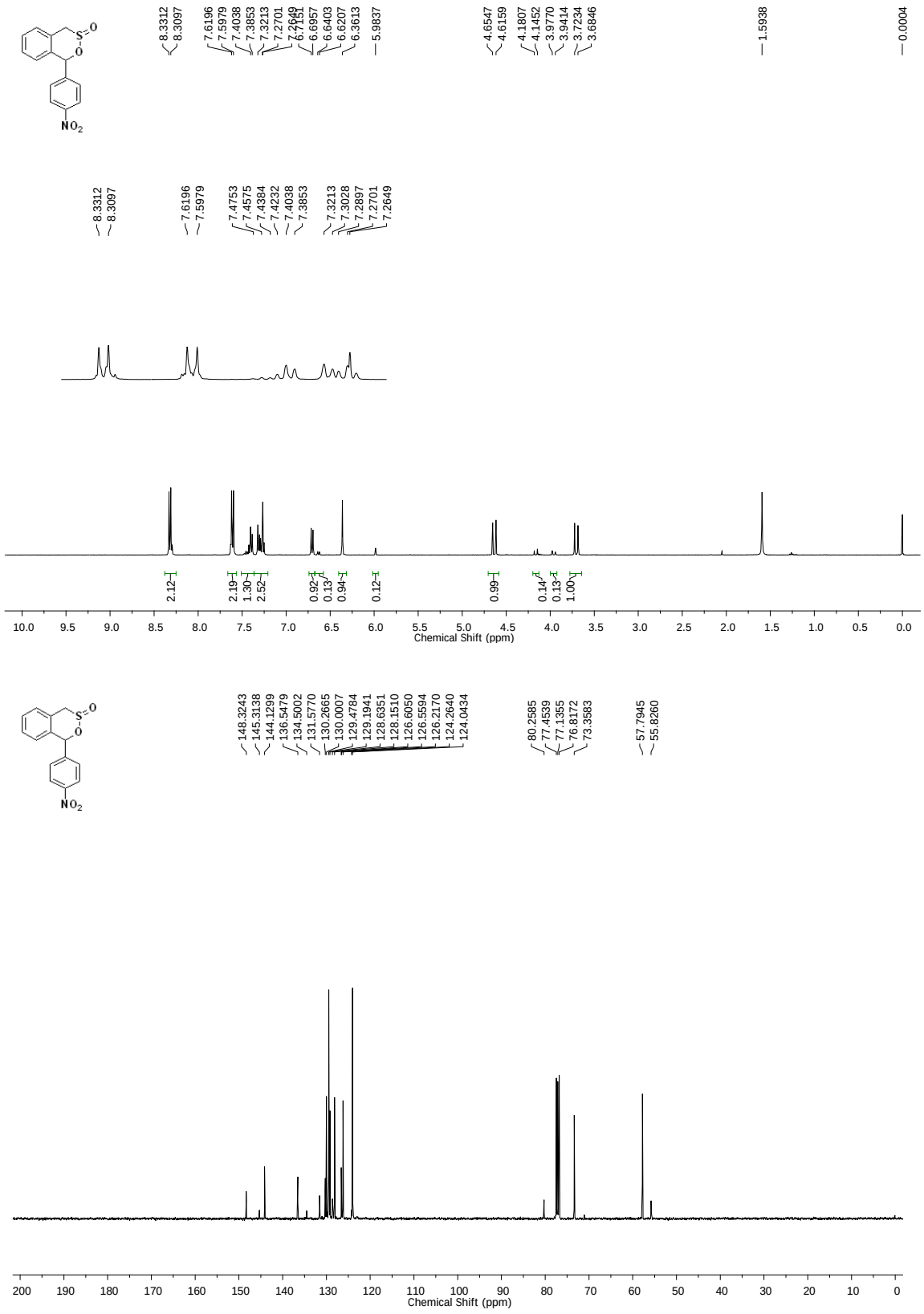


Figure S10. NMR spectra of **11j**

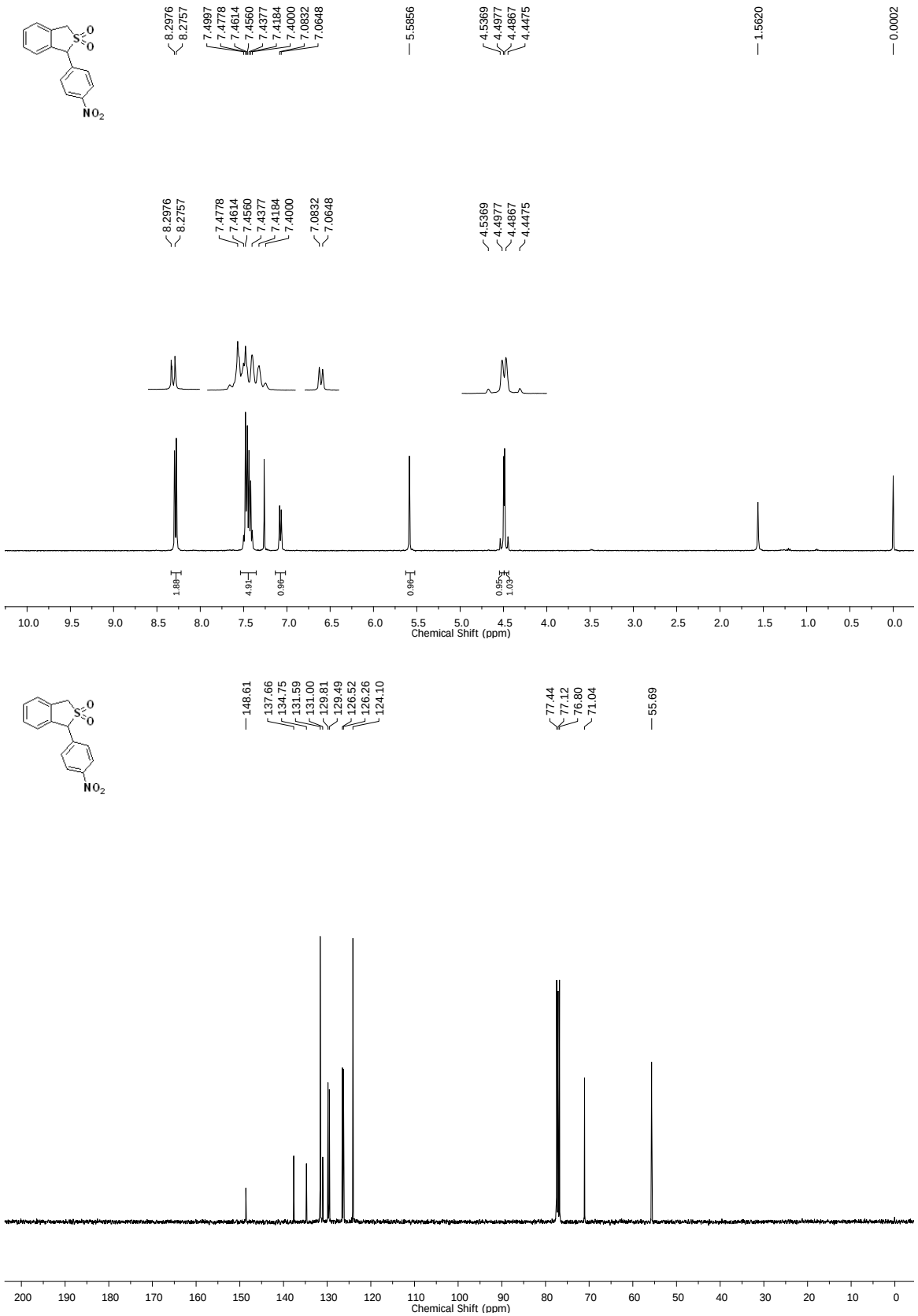


Figure S11. NMR spectra of **12j**

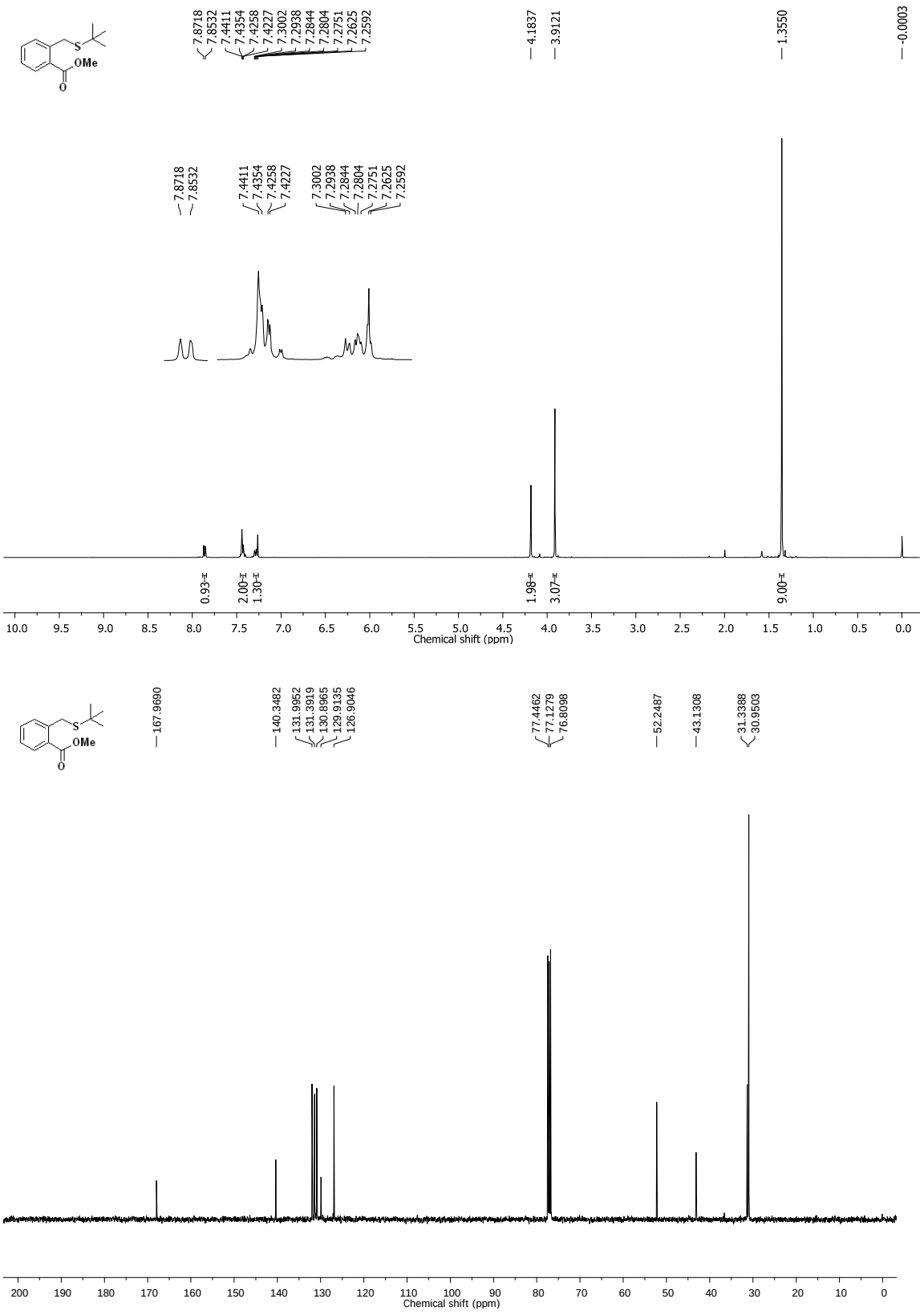


Figure S12. NMR spectra of **19**

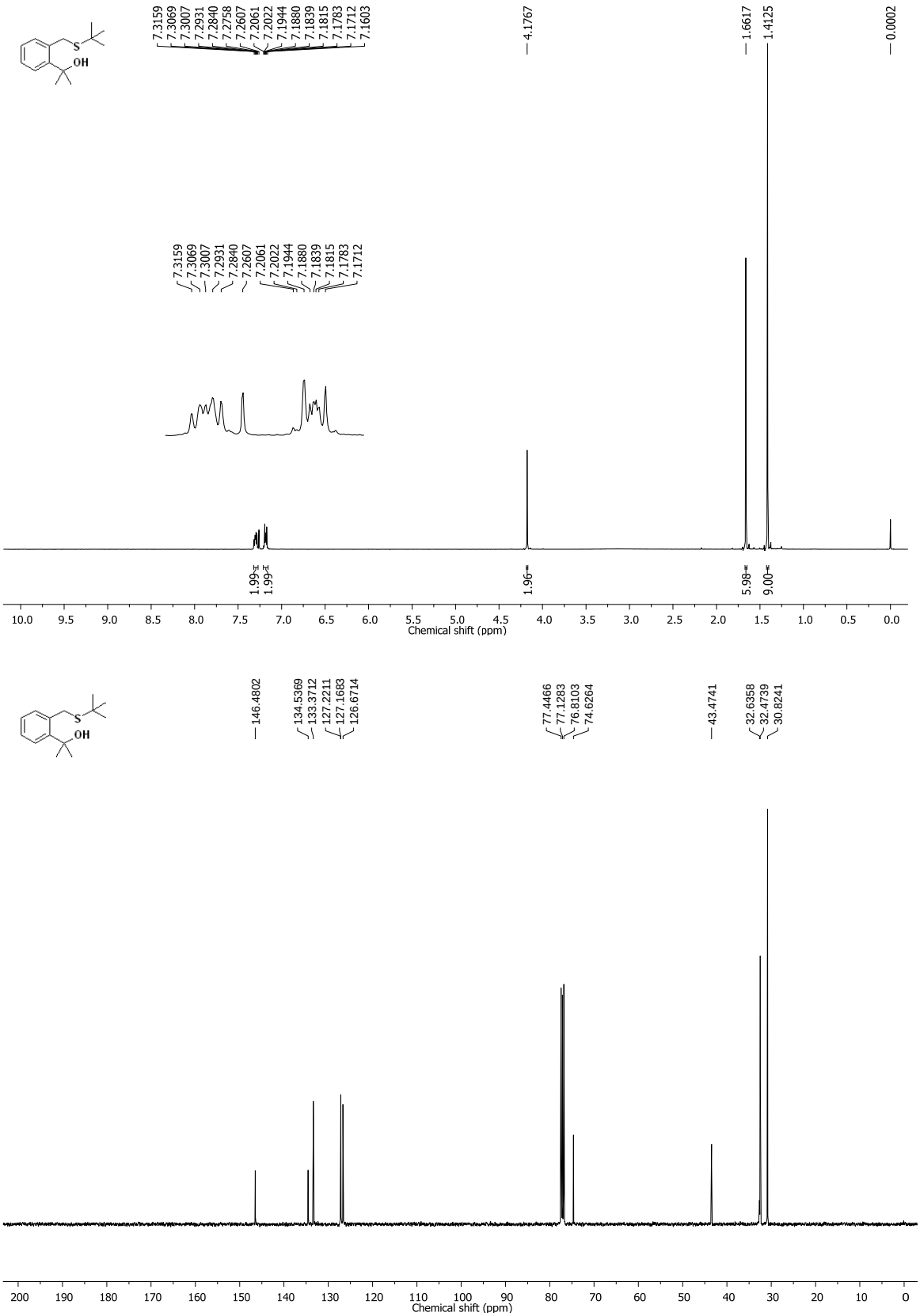


Figure S13. NMR spectra of **20**

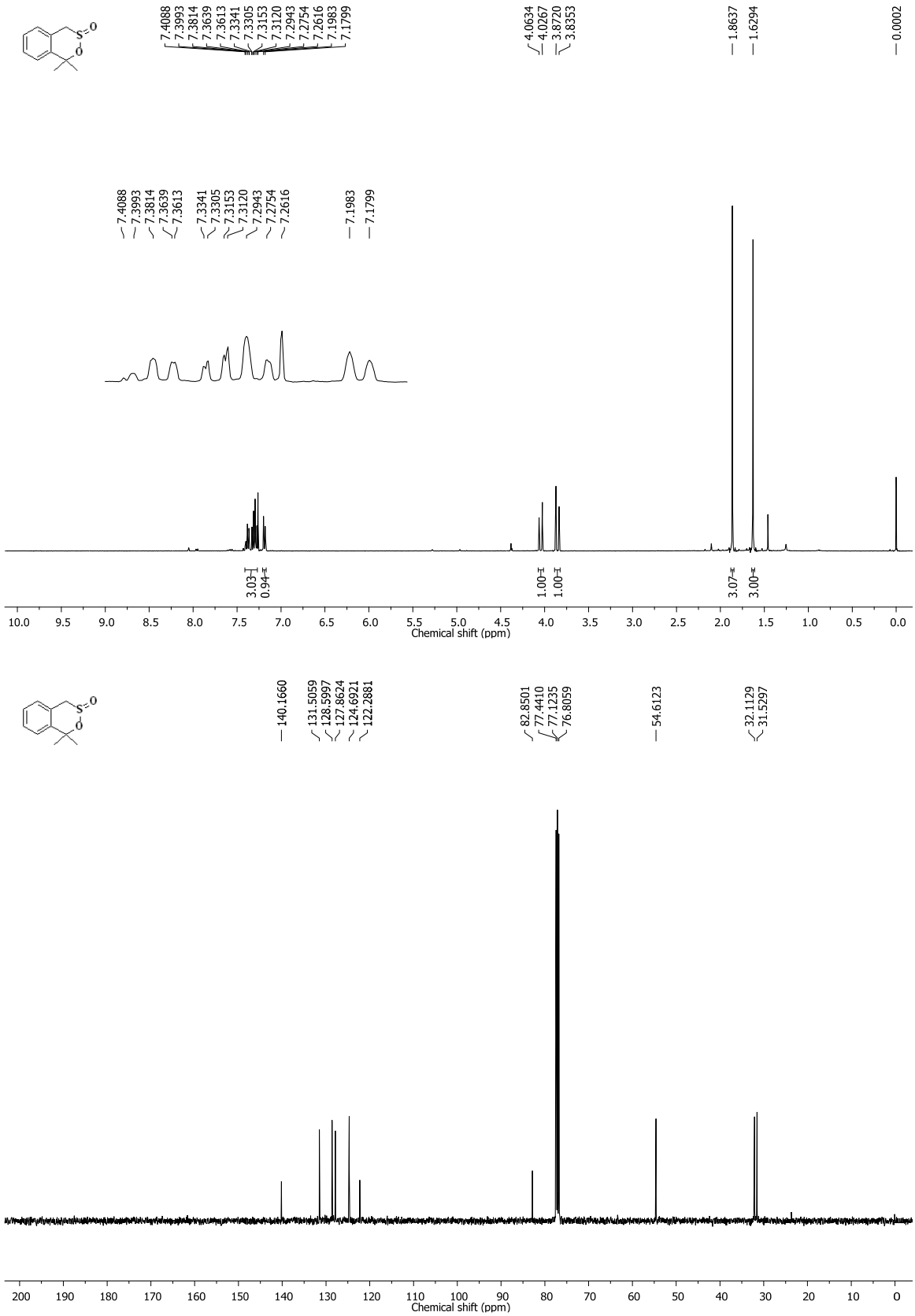


Figure S14. NMR spectra of **21**

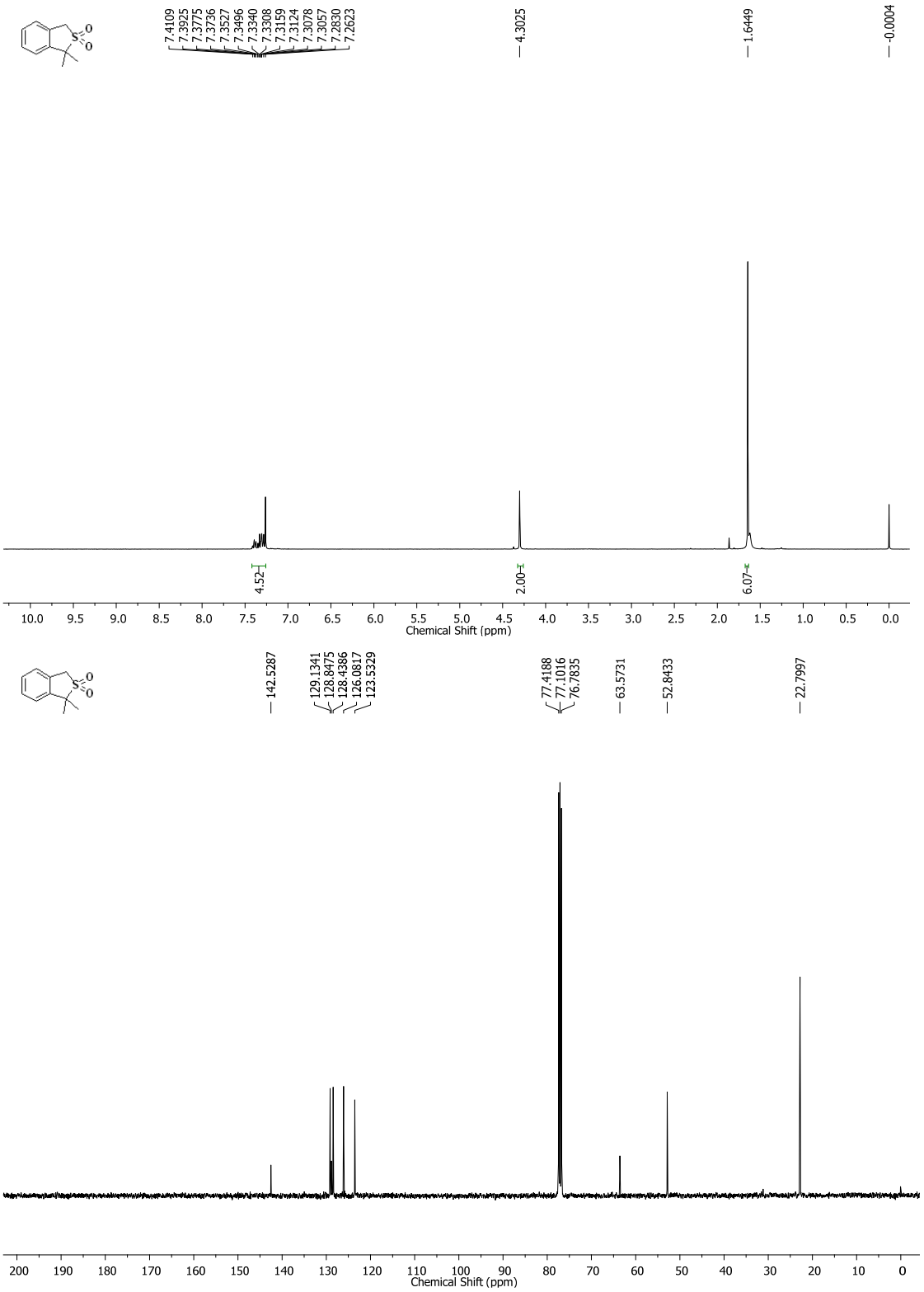


Figure S15. NMR spectra of **22**