

Electronic Supplementary Information

Terminal Nickel(II) Amide, Alkoxide, and Thiolate Complexes Containing Amido Diphosphine Ligands of the Type $[N(o-C_6H_4PR_2)_2]^-$ (R = Ph, ⁱPr, Cy)

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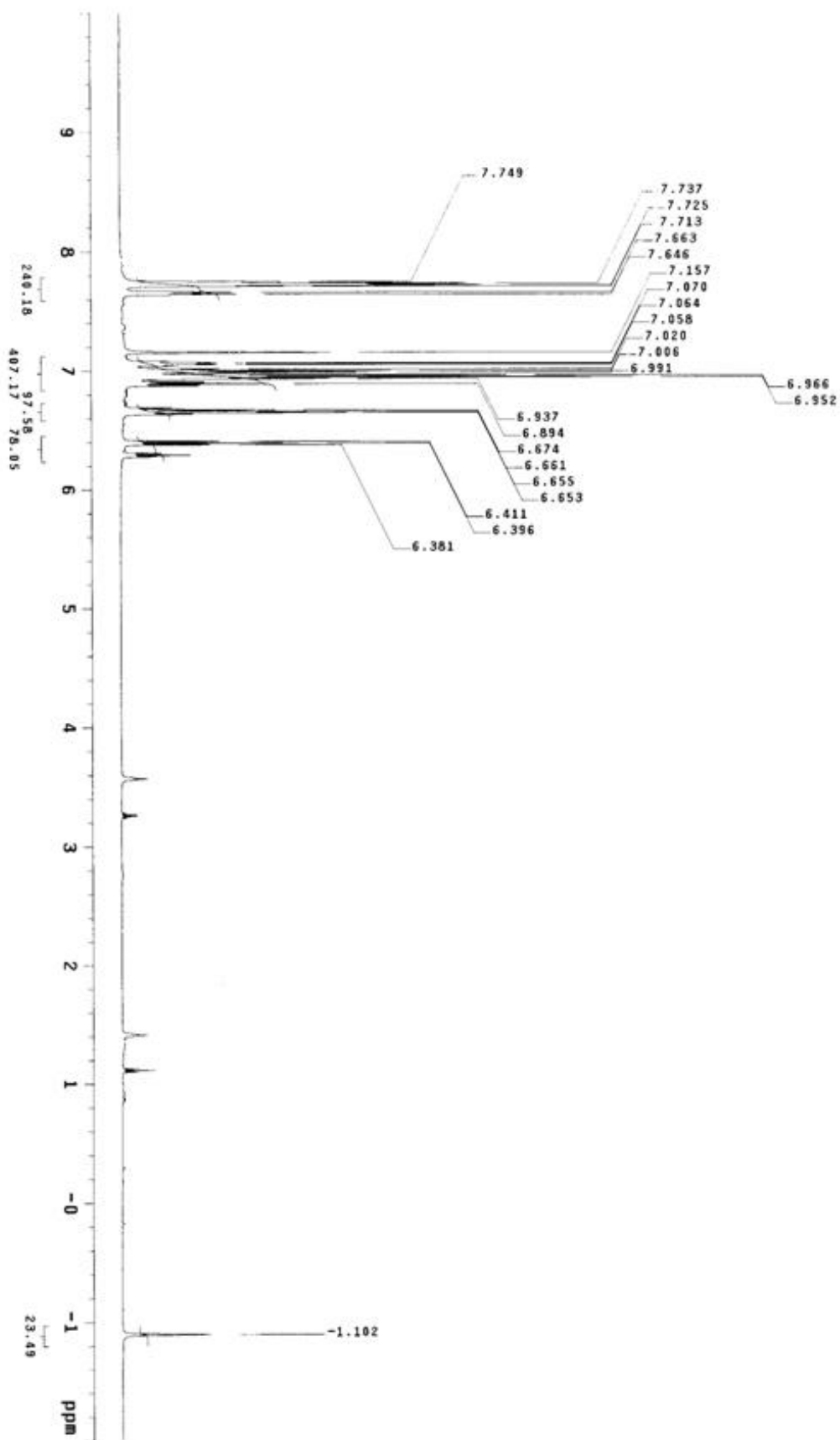


Figure S1. ^1H NMR spectrum (500 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NHPh})$ in C_6D_6 at room temperature

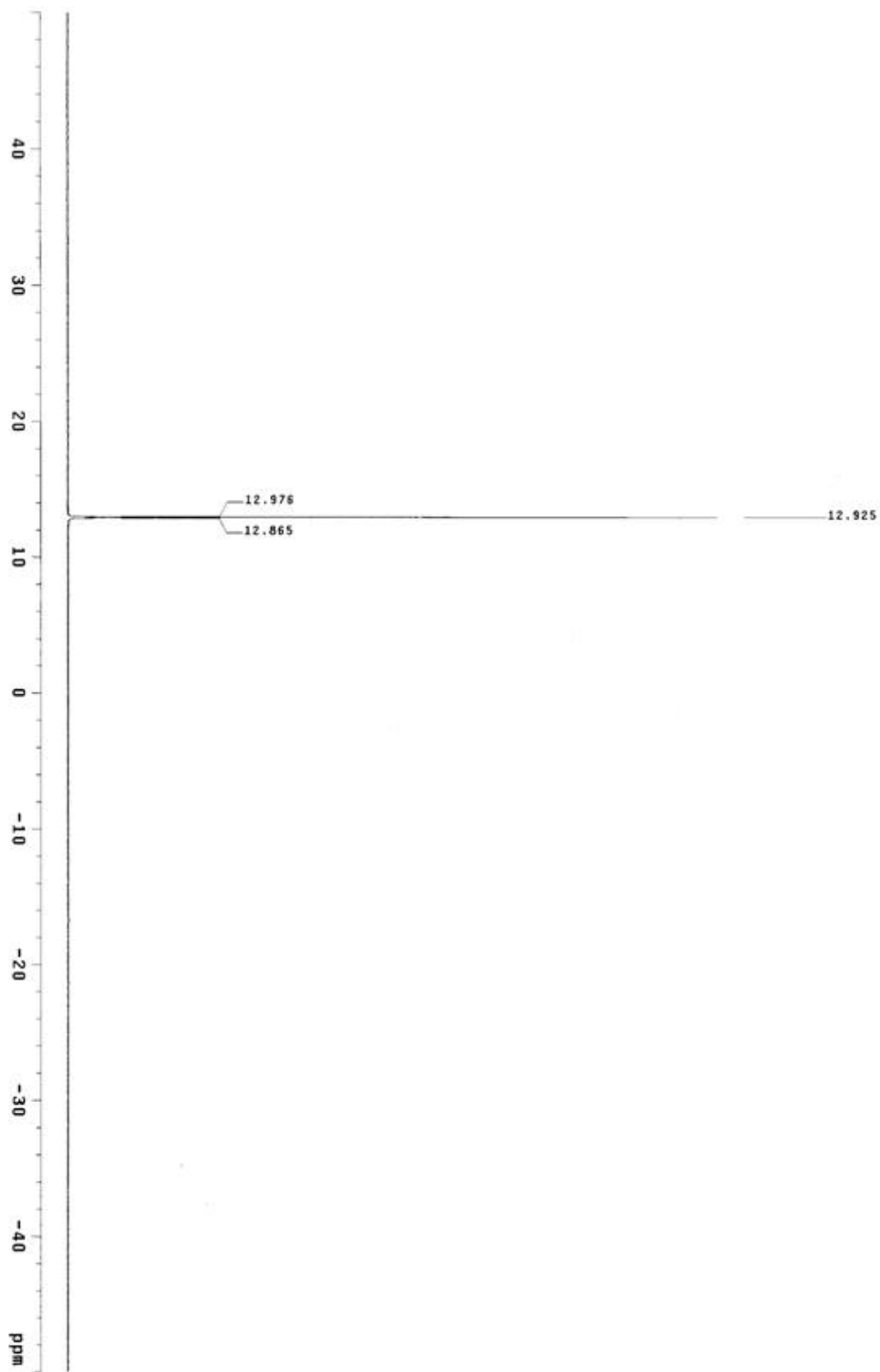


Figure S2. $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum (202 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NHPh})$ in C_6D_6 at room temperature

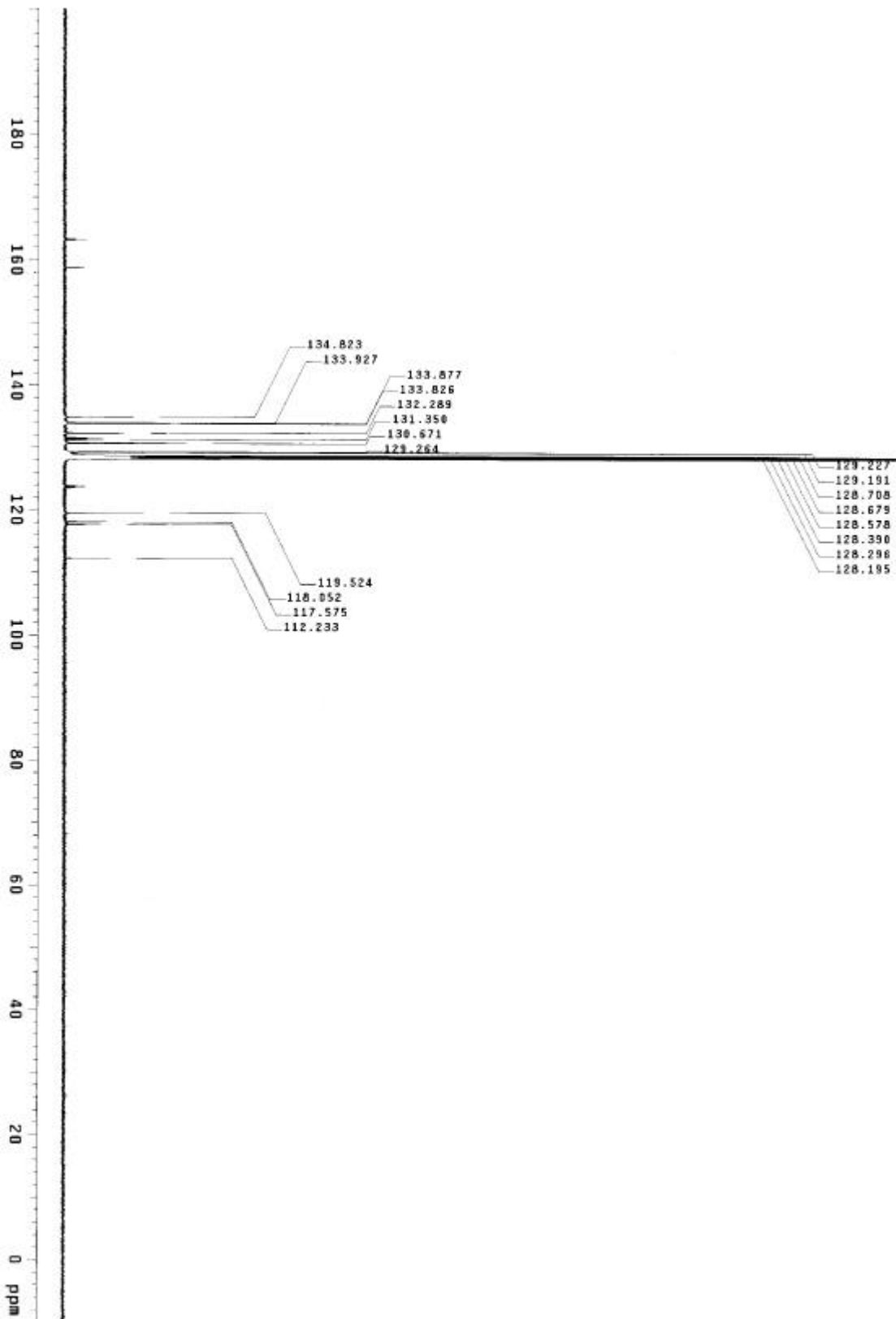


Figure S3. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum (125.7 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NHPh})$ in C_6D_6 at room temperature

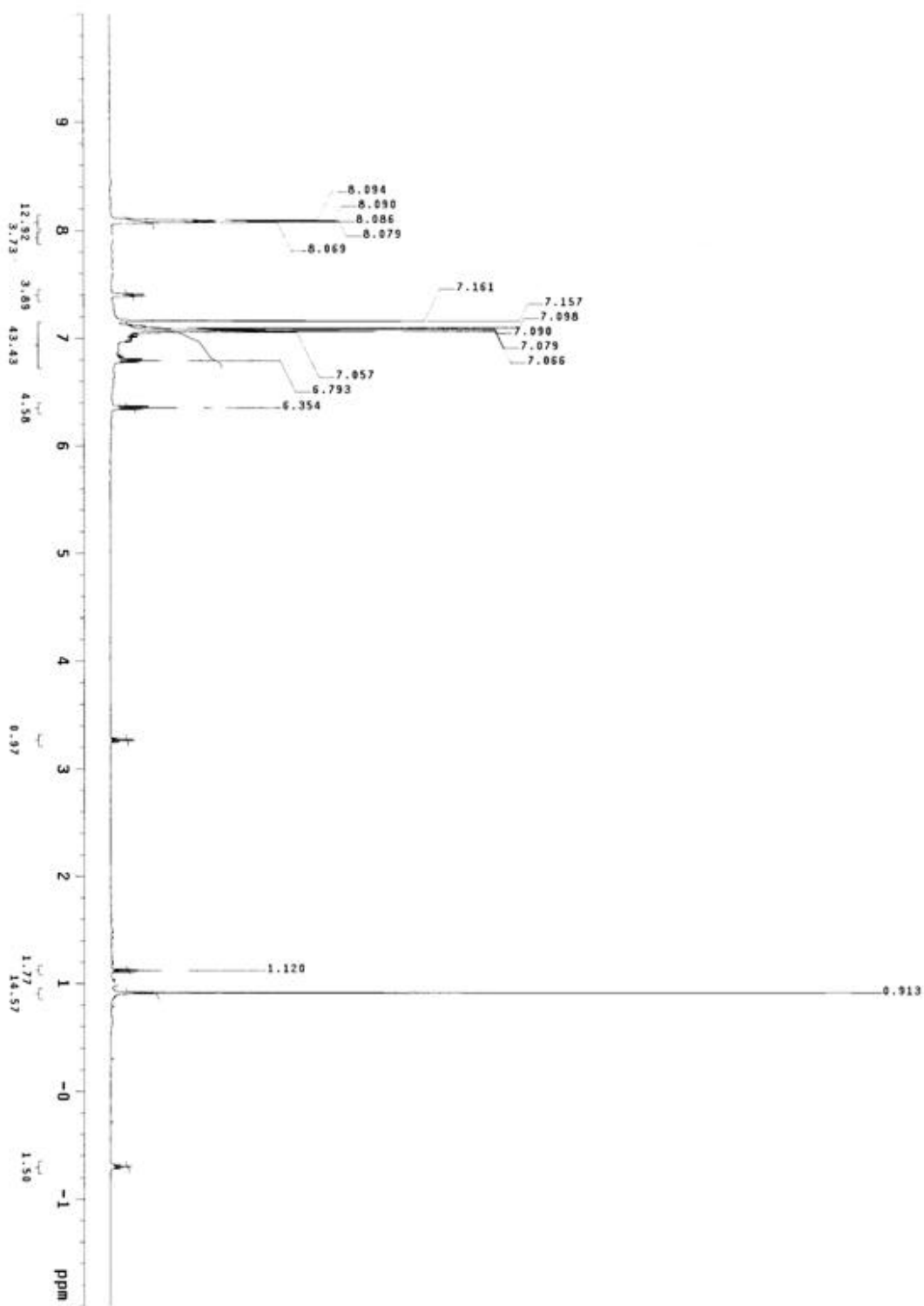


Figure S4. ^1H NMR spectrum (500 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NH}^t\text{Bu})$ in C_6D_6 at room temperature

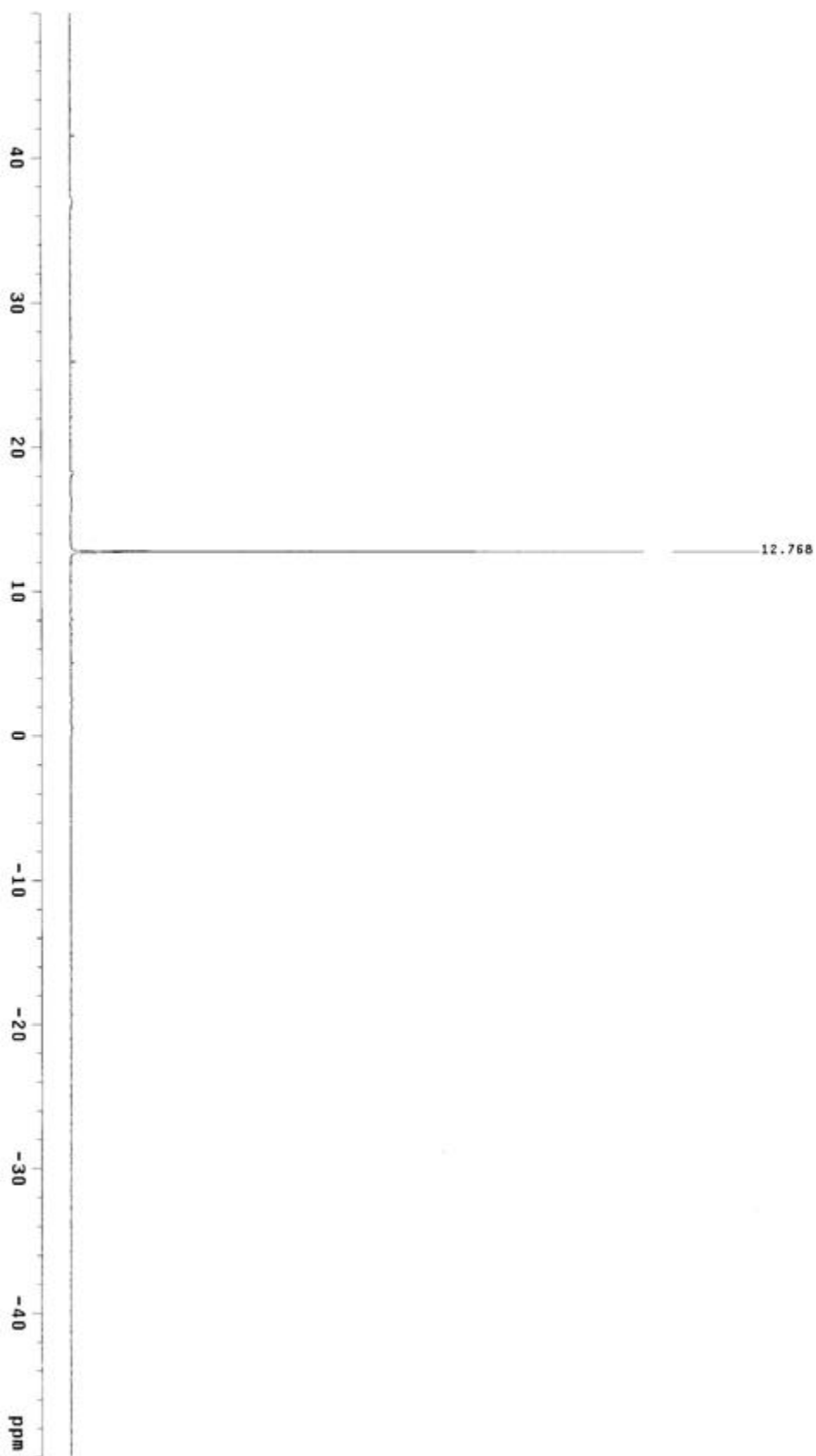


Figure S5. $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum (202 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NH}^t\text{Bu})$ in C_6D_6 at room temperature

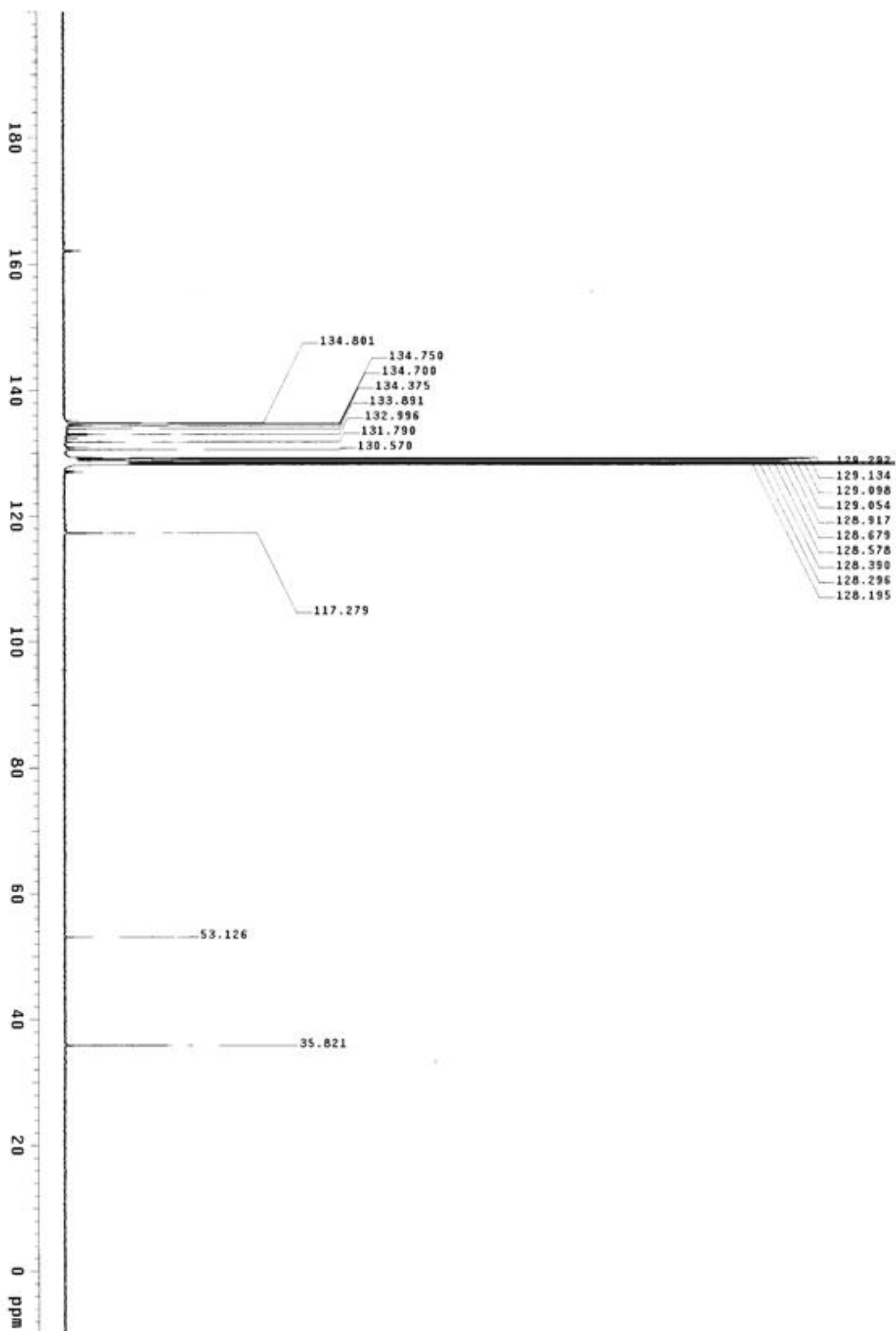


Figure S6. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum (125.7 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{NH}^t\text{Bu})$ in C_6D_6 at room temperature

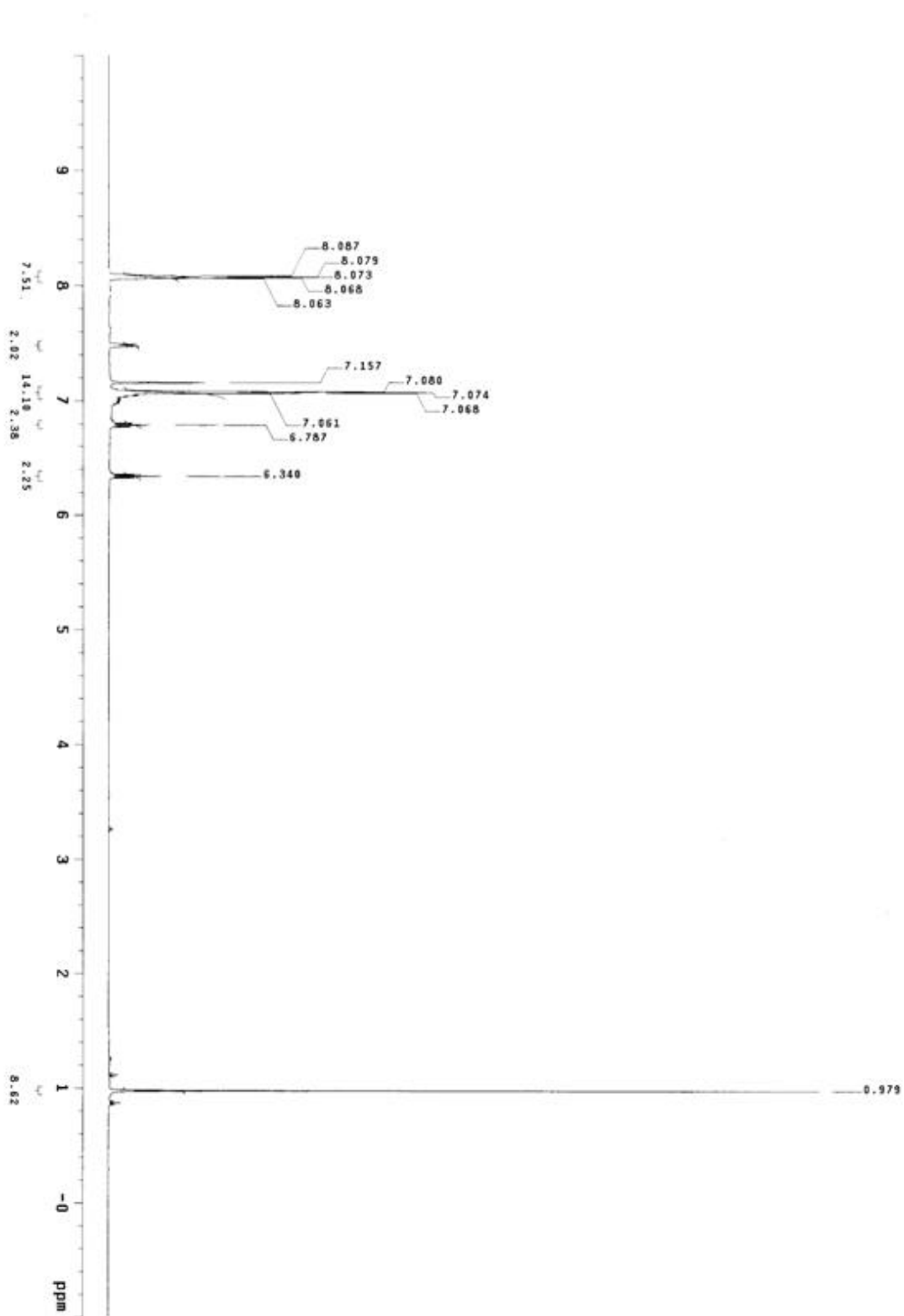


Figure S7. ¹H NMR spectrum (500 MHz) of [Ph-PNP]Ni(O^tBu) in C₆D₆ at room temperature

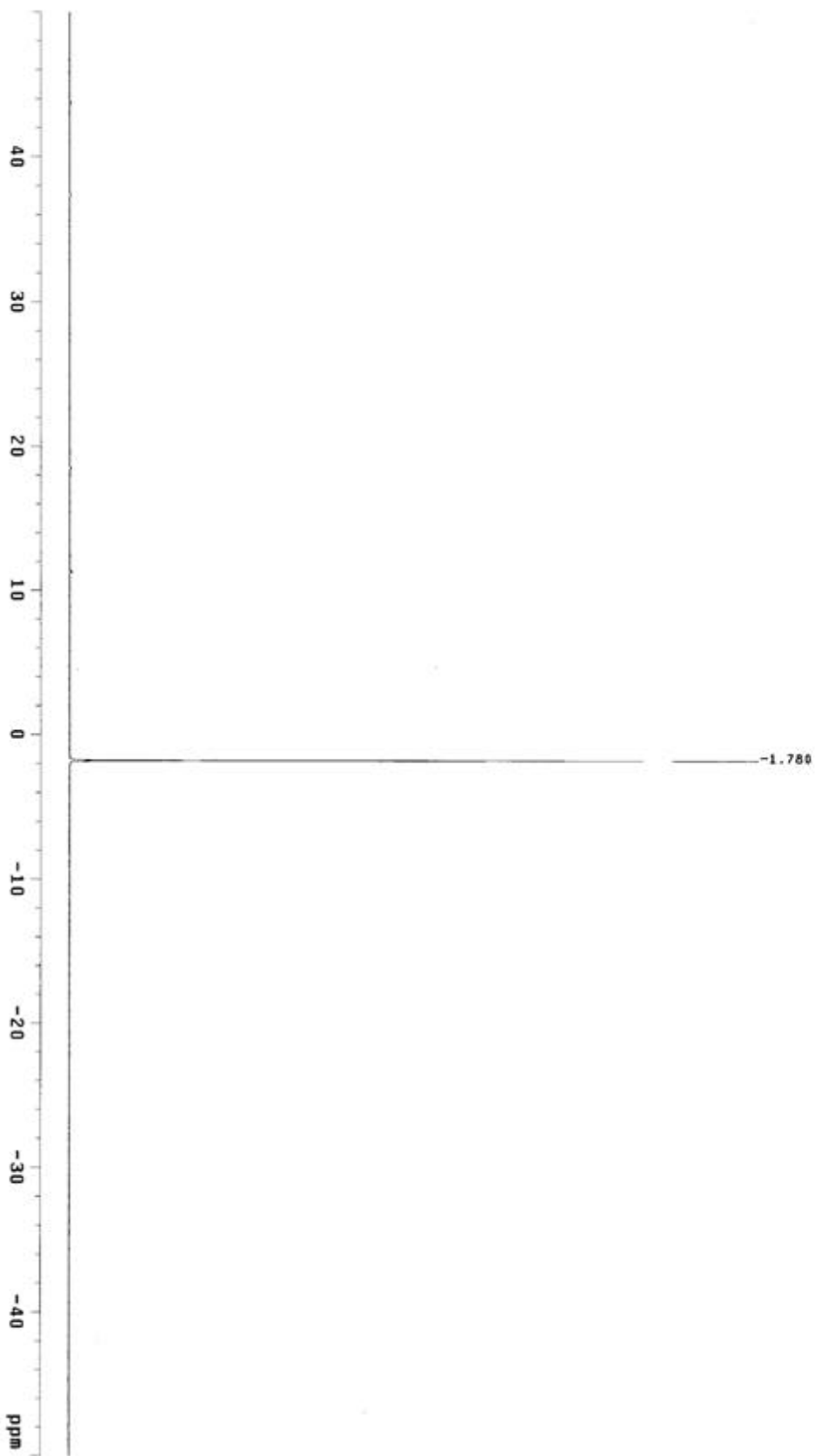


Figure S8. ^{31}P $\{^1\text{H}\}$ NMR spectrum (202 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{O}^t\text{Bu})$ in C_6D_6 at room temperature

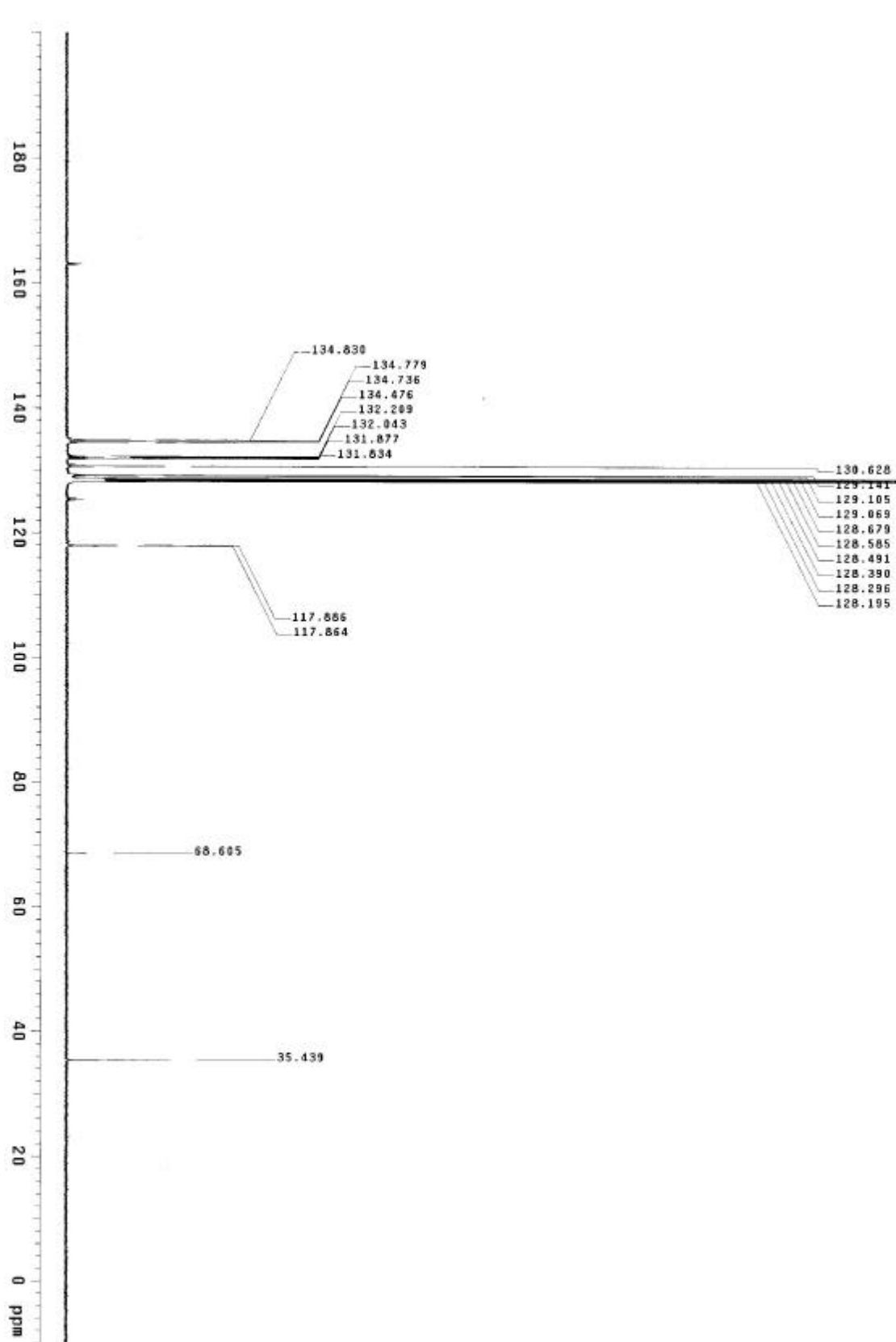


Figure S9. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum (125.7 MHz) of $[\text{Ph-PNP}]\text{Ni}(\text{O}^t\text{Bu})$ in C_6D_6 at room temperature