

Electronic Supplementary Information – Part 2:

Amino Acid-Derived Hydroxamic Acids as Ligands in Vanadium Catalyzed Epoxidation. Accelerating Effect of Sulfonamide Group

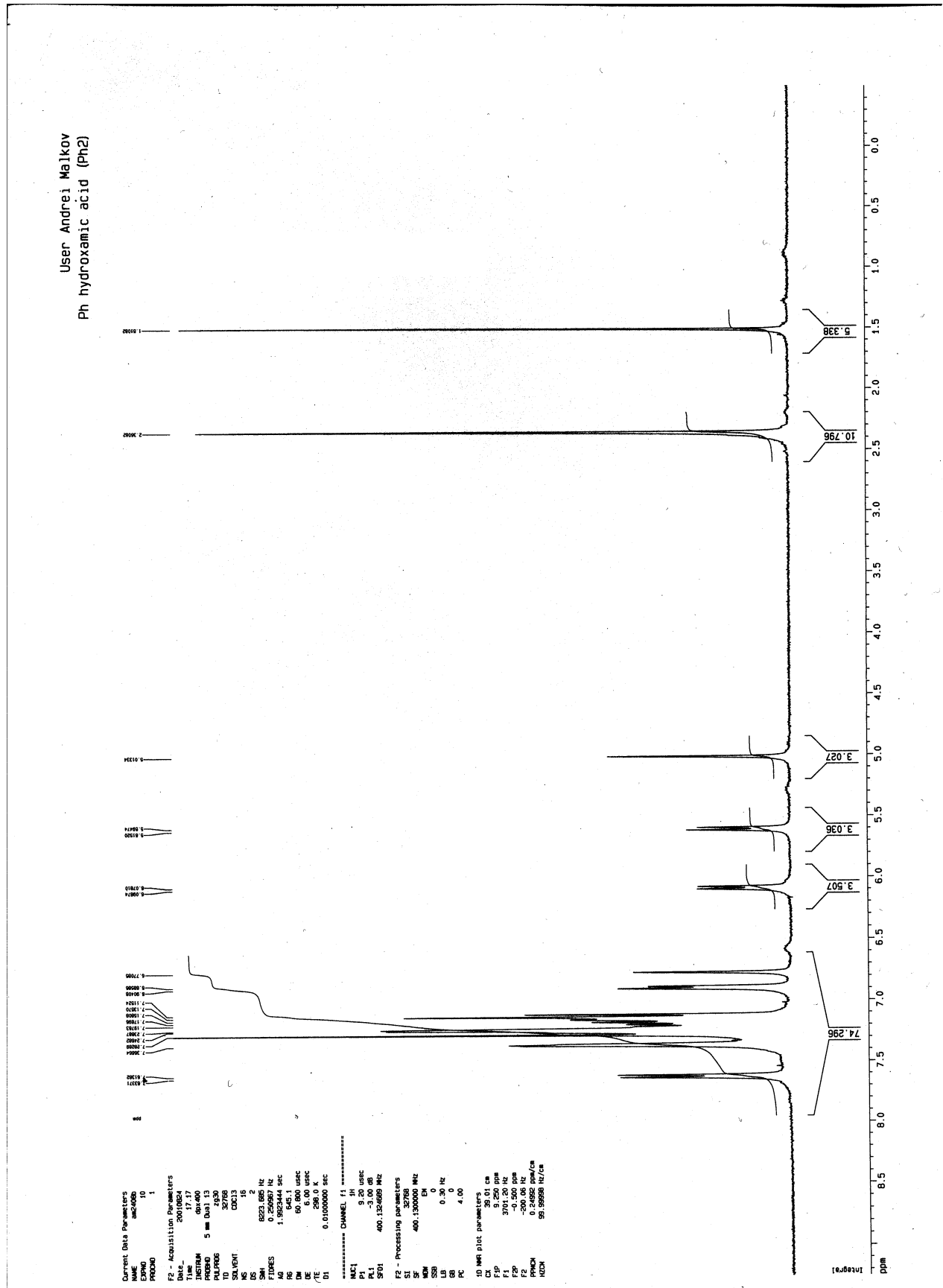
Andrei V. Malkov,* Zainaba Bourhani, and Pavel Kočovský

Department of Chemistry, WestChem, Joseph Black Building, University of Glasgow, Glasgow G12 8QQ, UK
amalkov@chem.gla.ac.uk

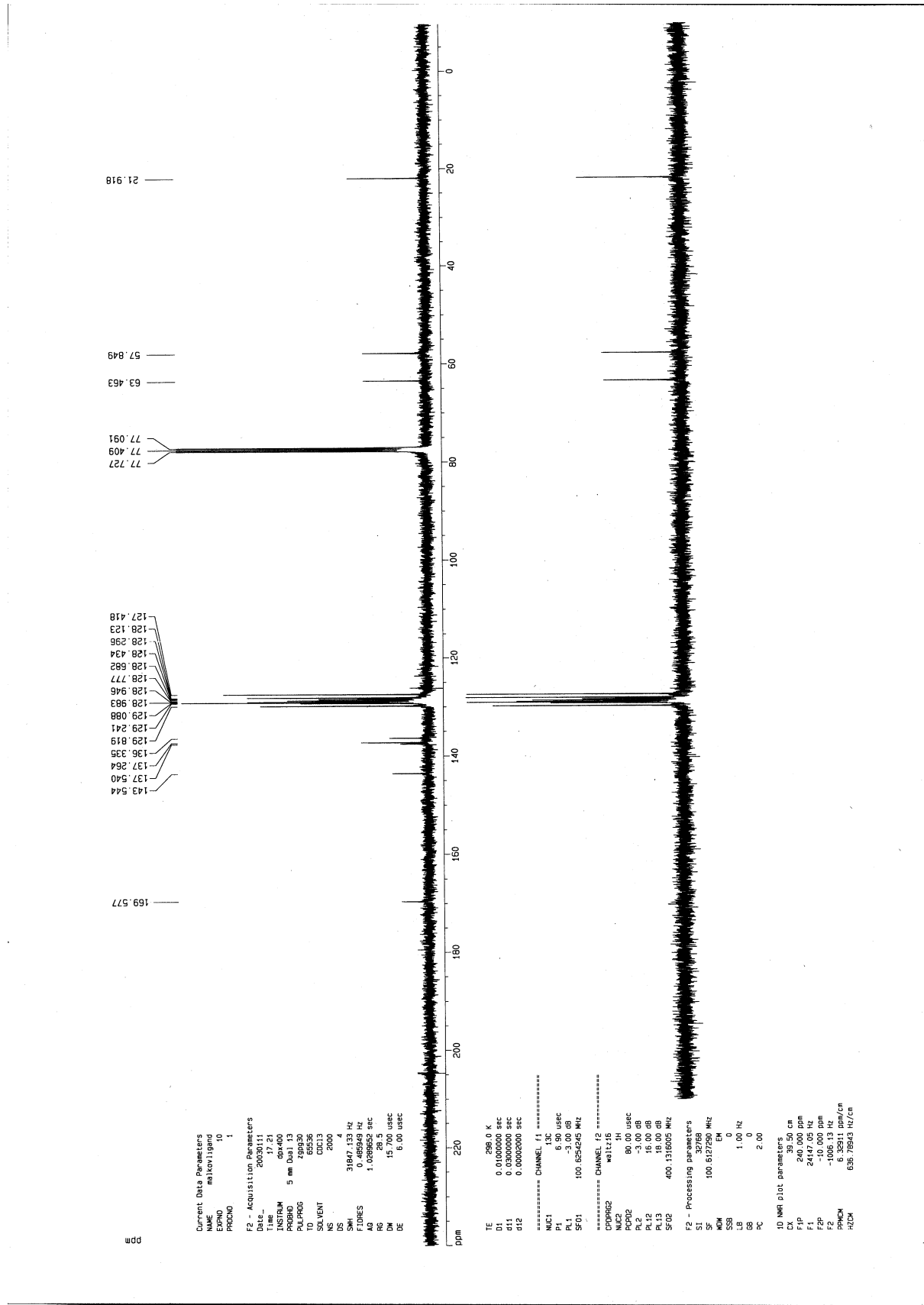
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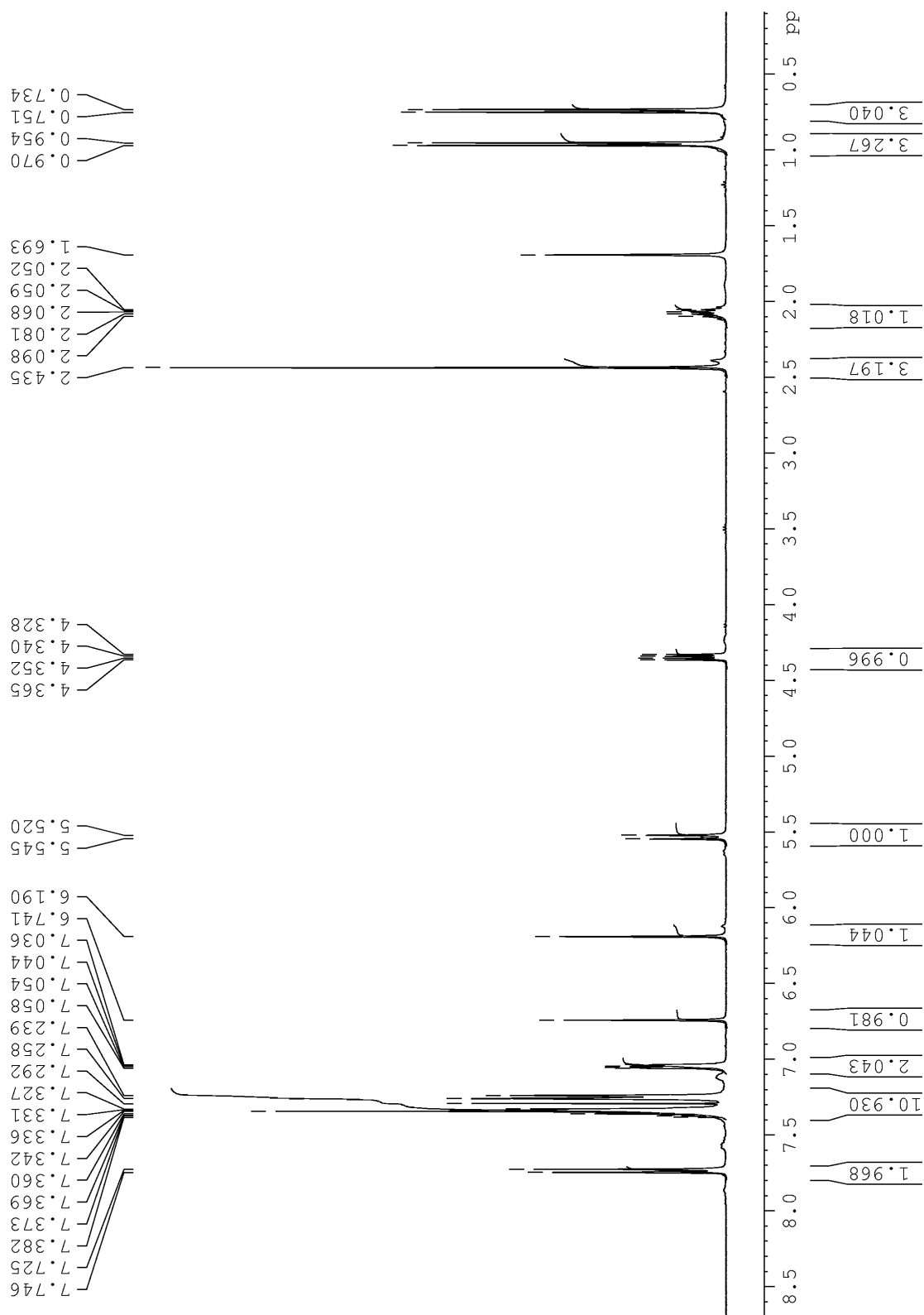
¹H and ¹³C NMR spectra of key compounds

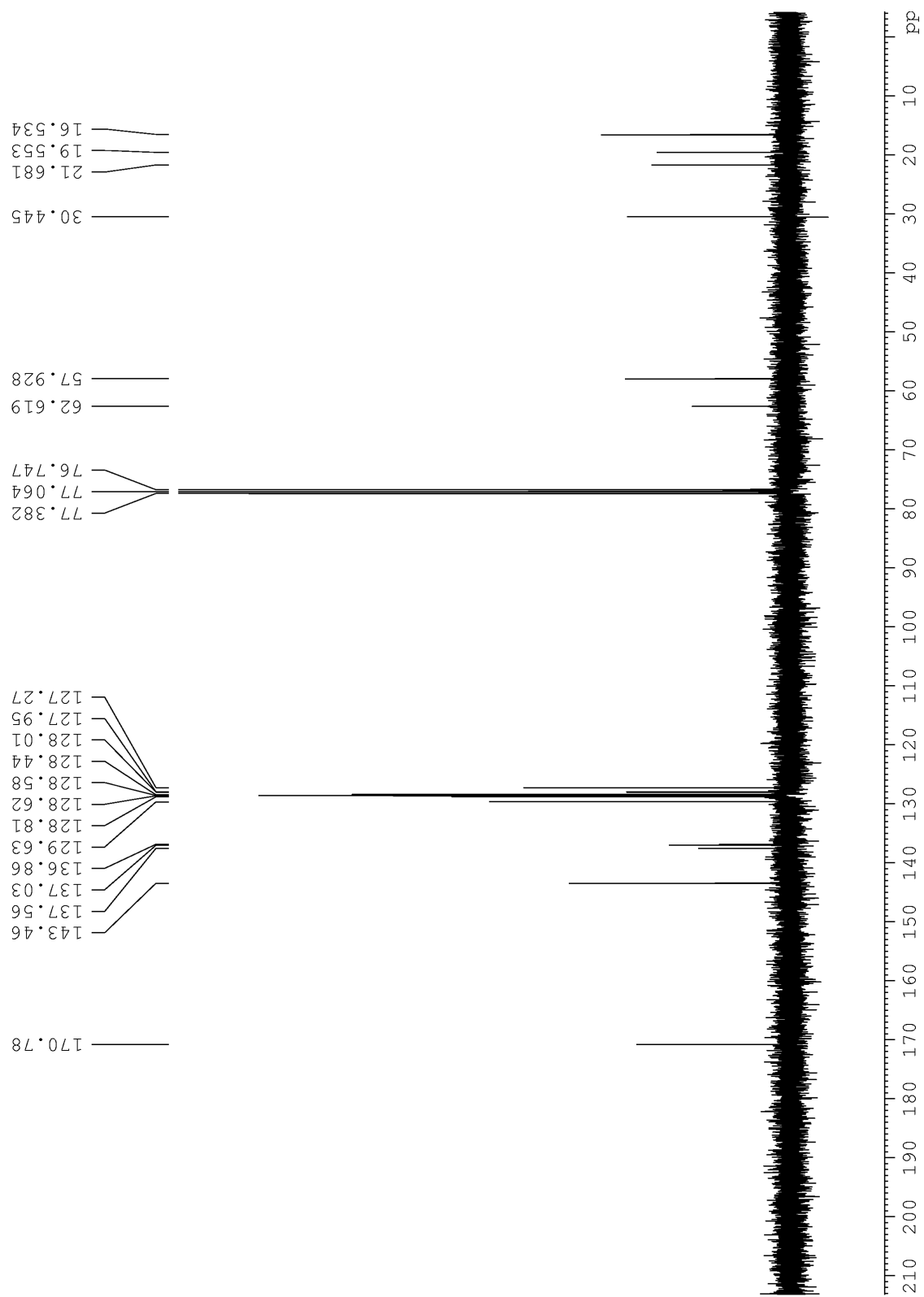
S(2)2 – S(2)31

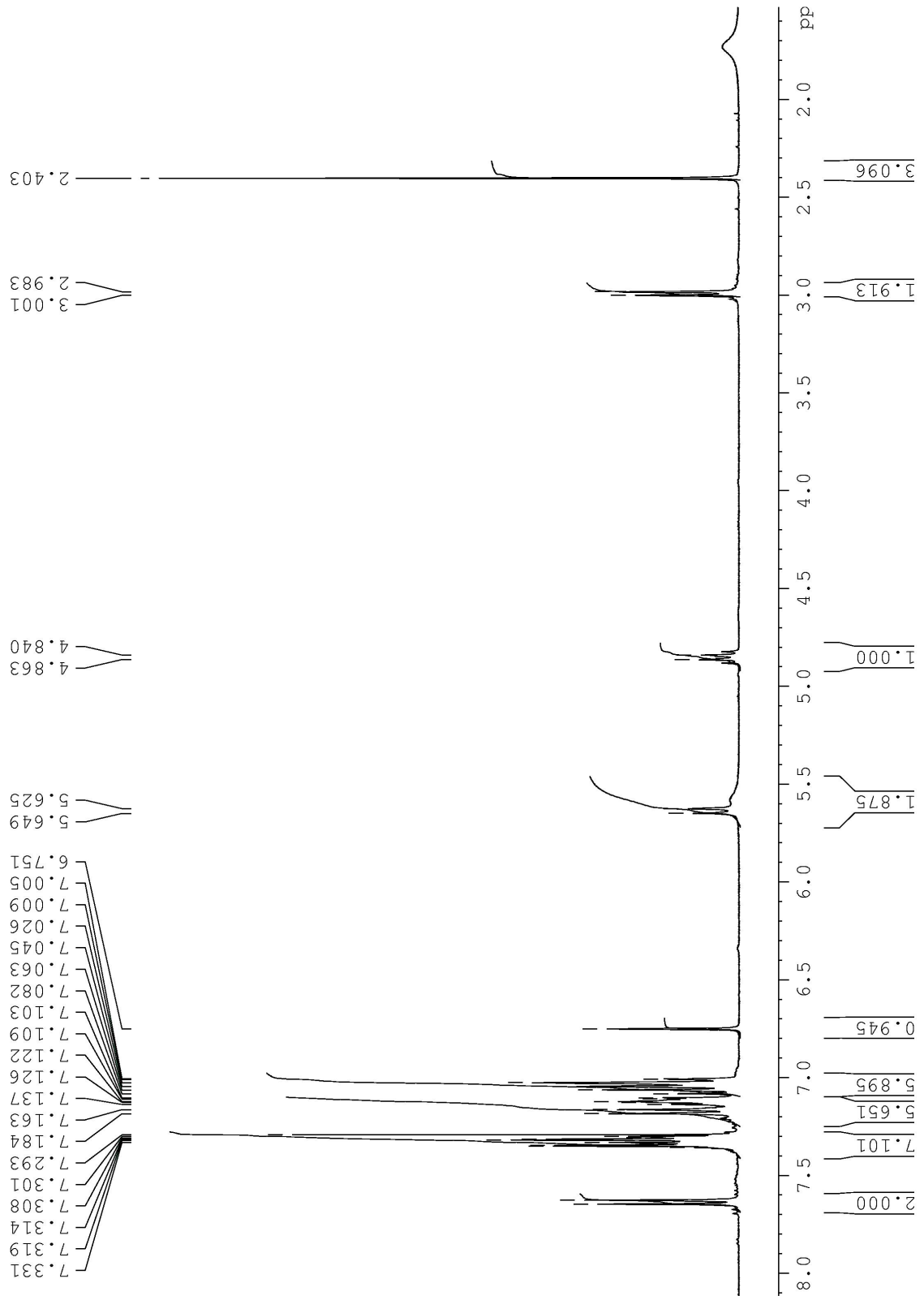
Ligand **7a**, ¹H NMR

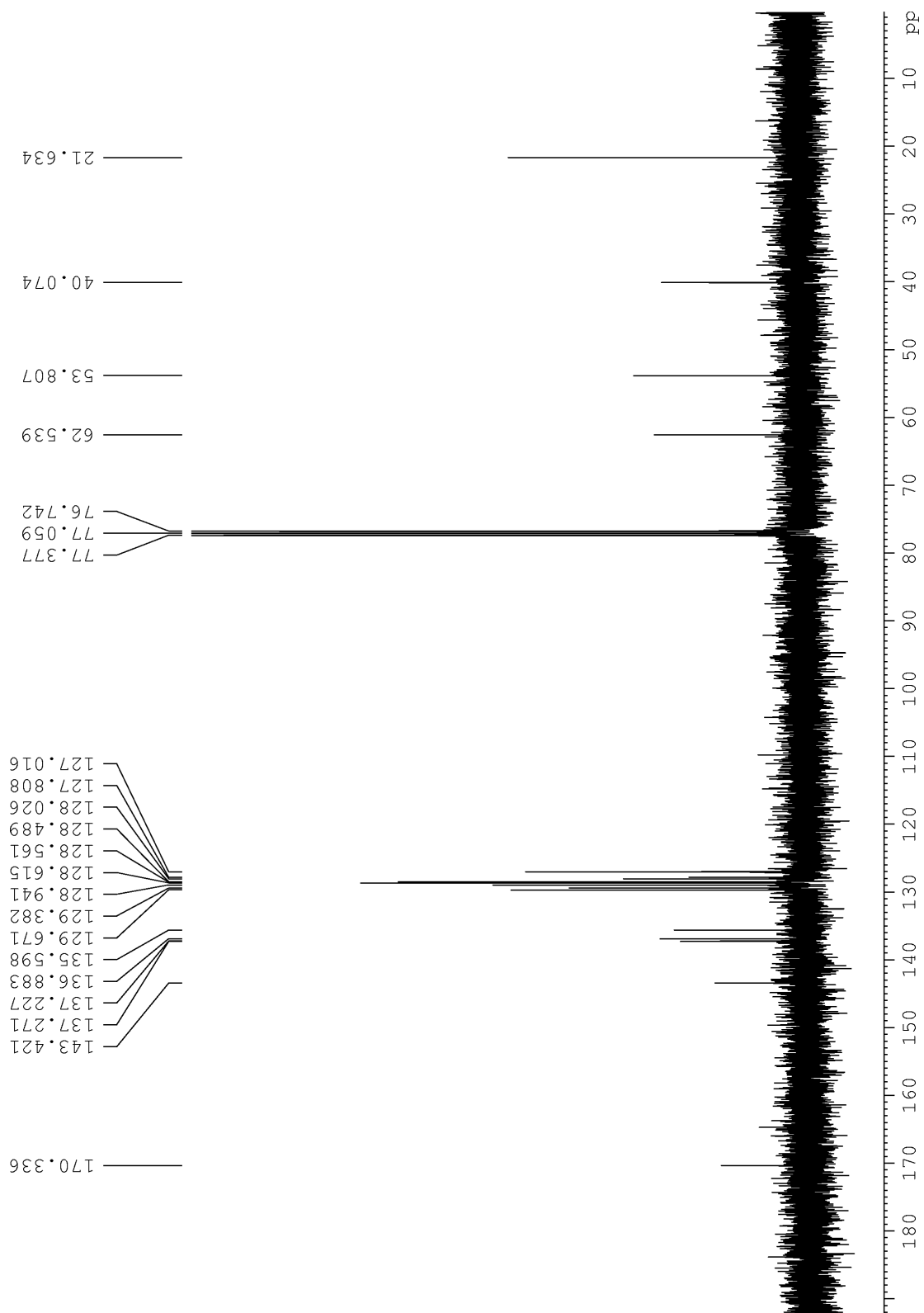
Ligand **7a**, ¹³C NMR

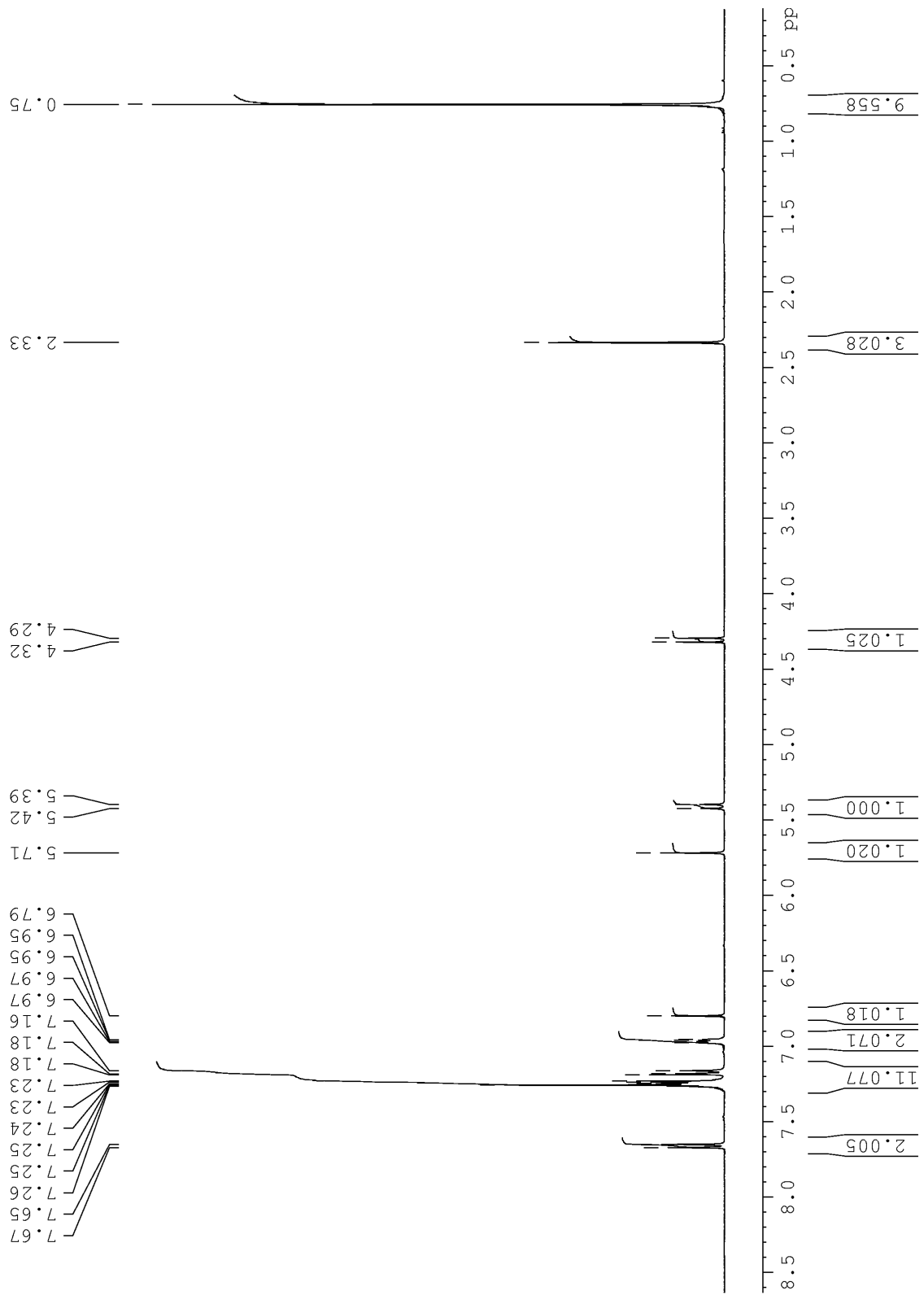


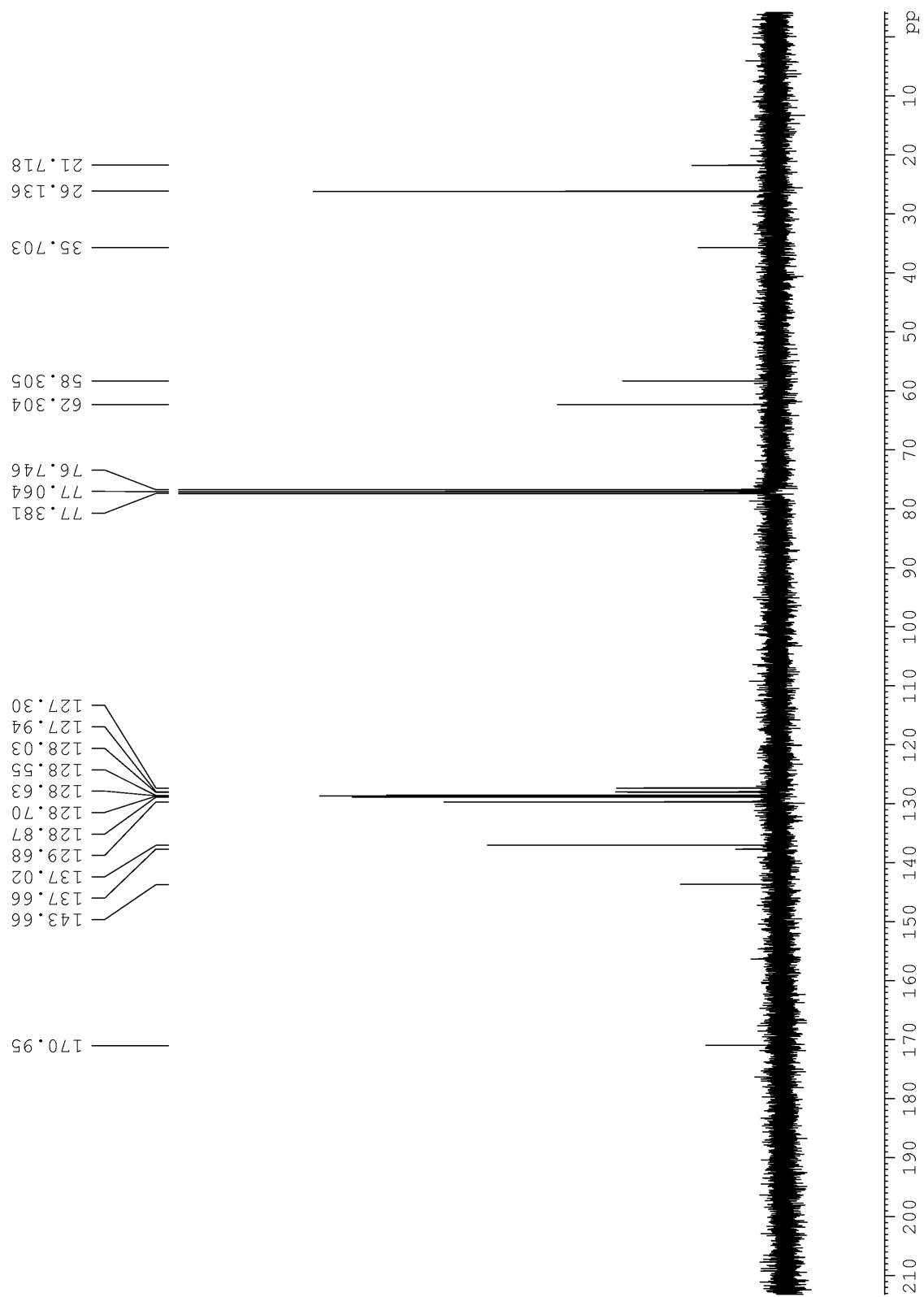
Ligand **7b**, ^1H NMR

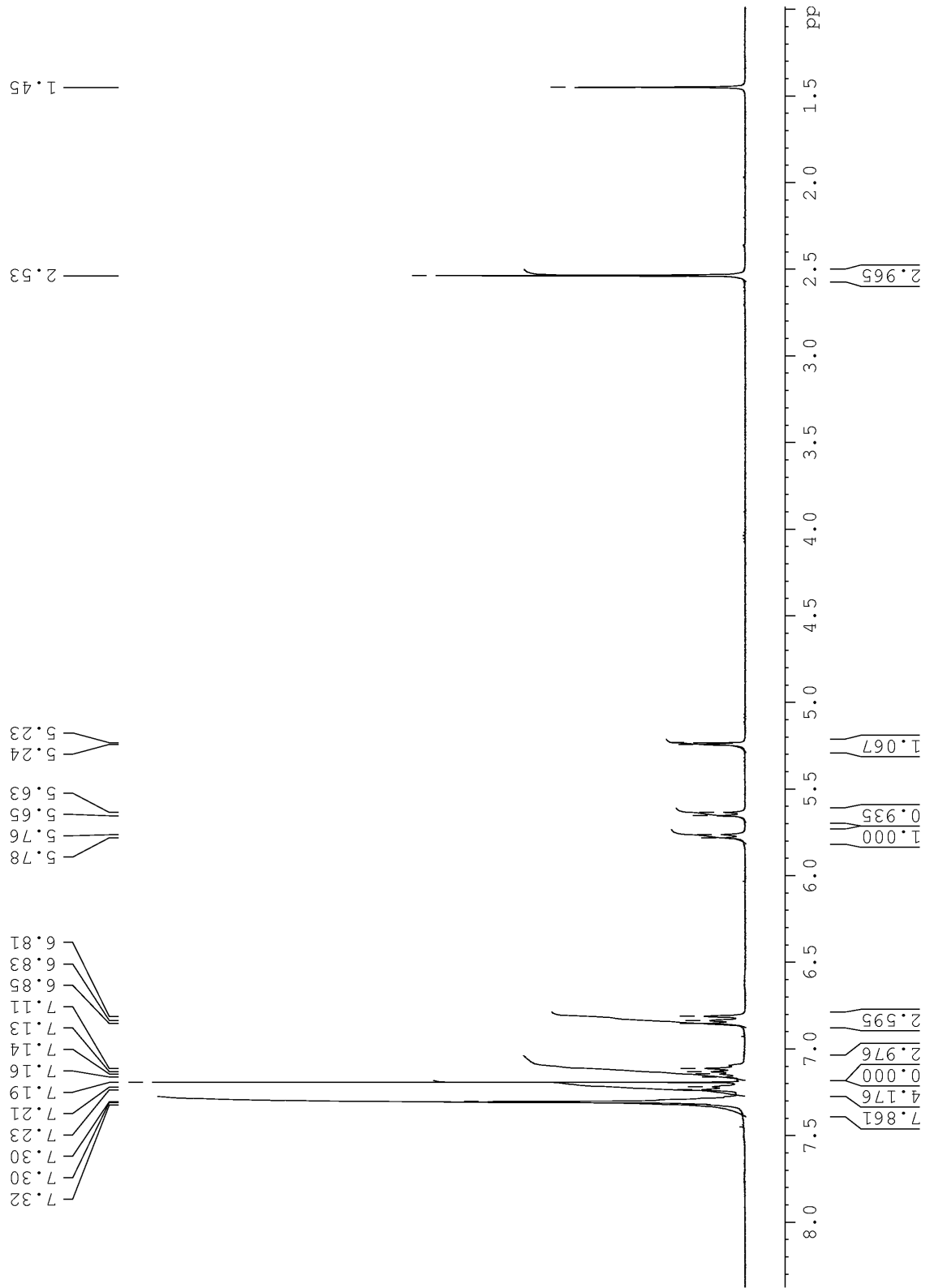
Ligand **7b**, ^{13}C NMR

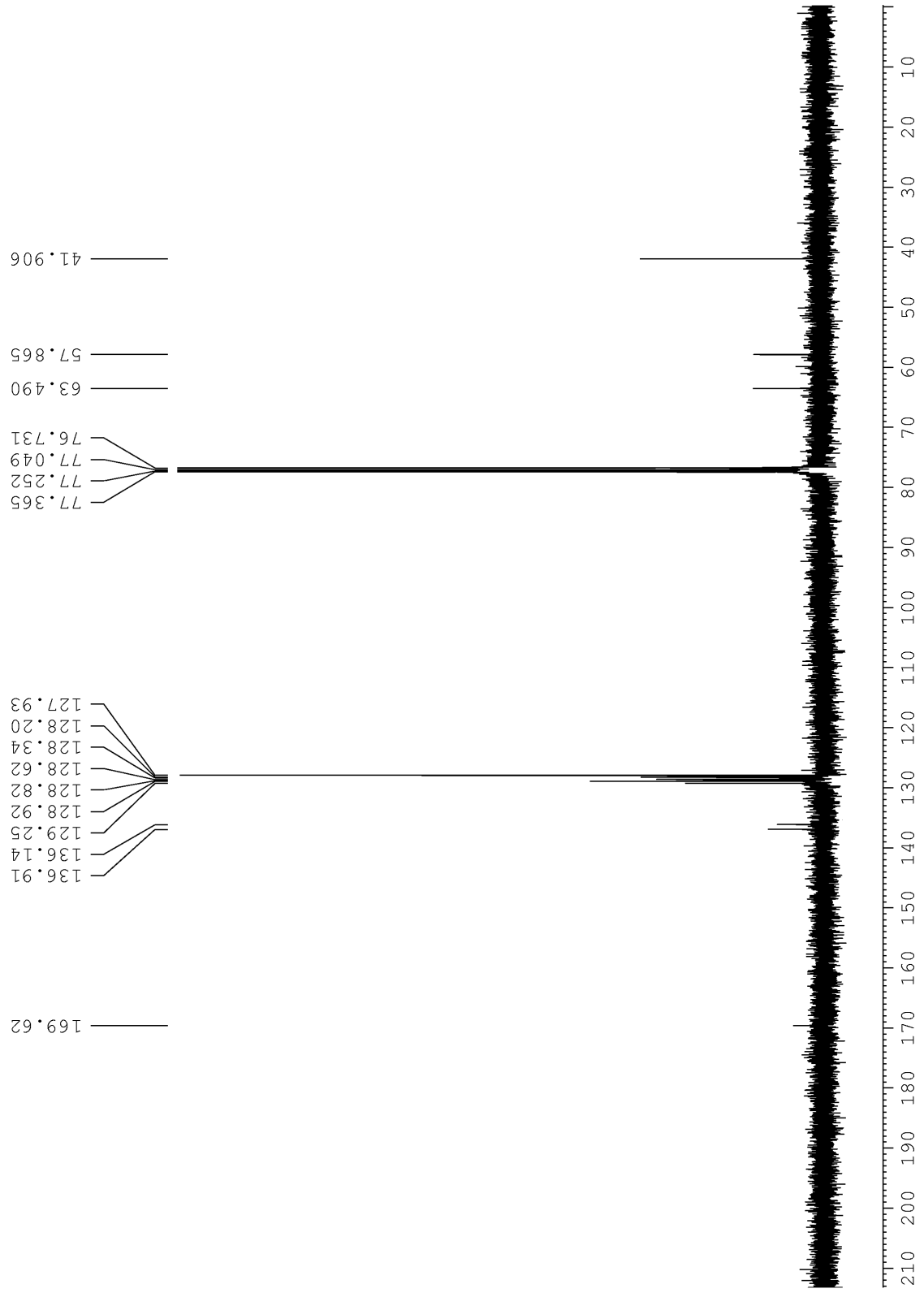
Ligand **7c**, ^1H NMR

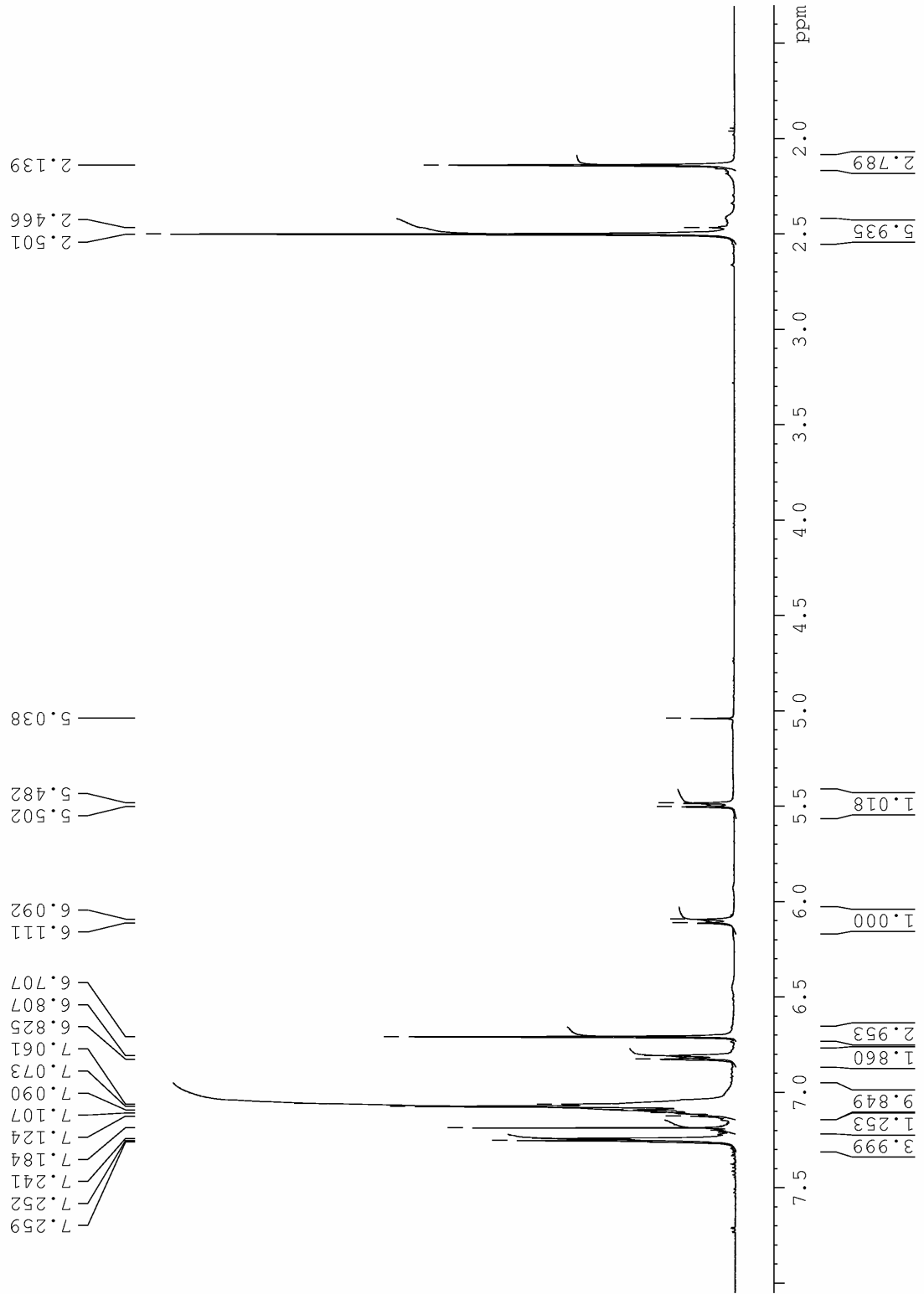
Ligand **7c**, ^{13}C NMR

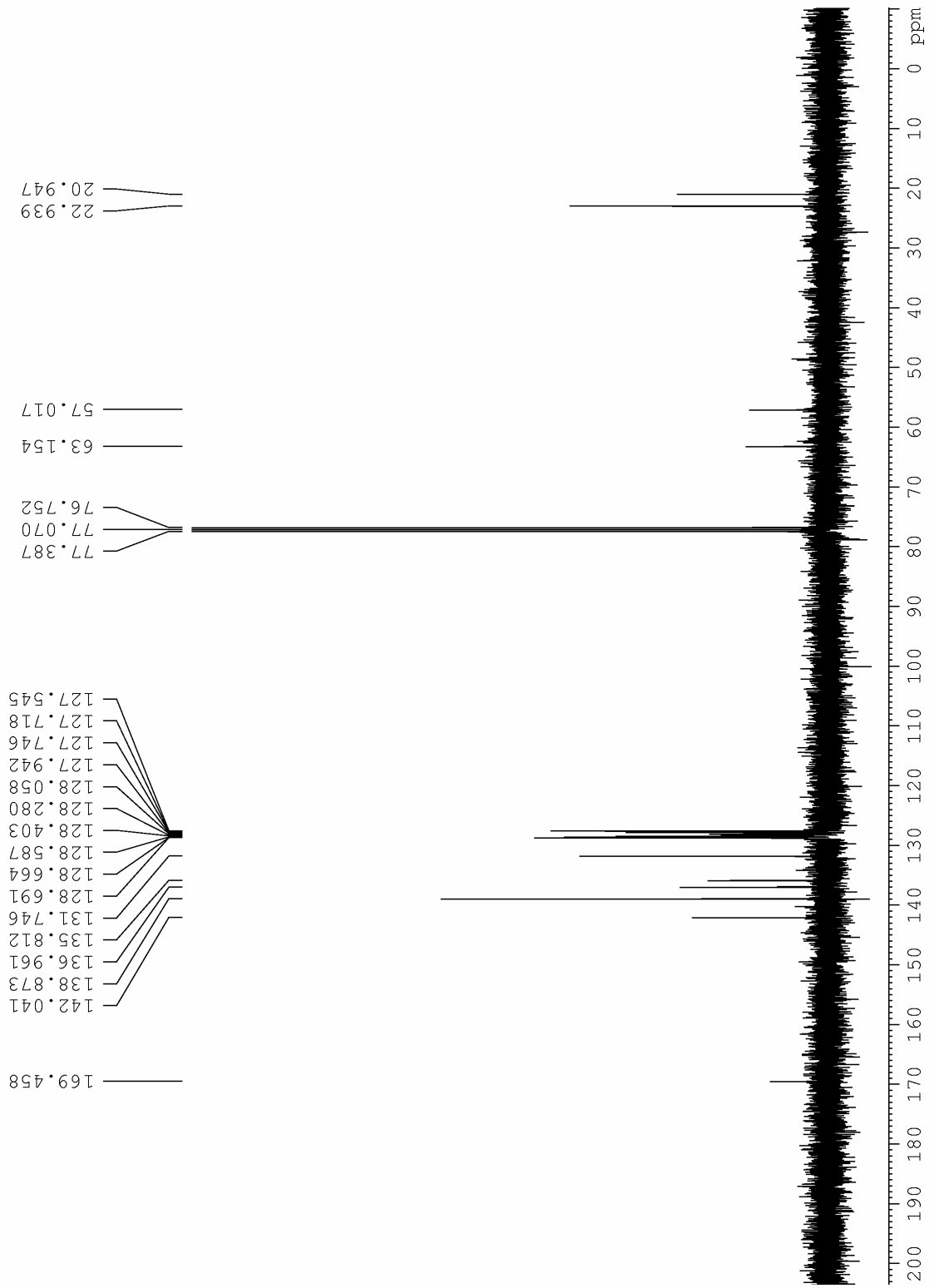
Ligand **7d**, ^1H NMR

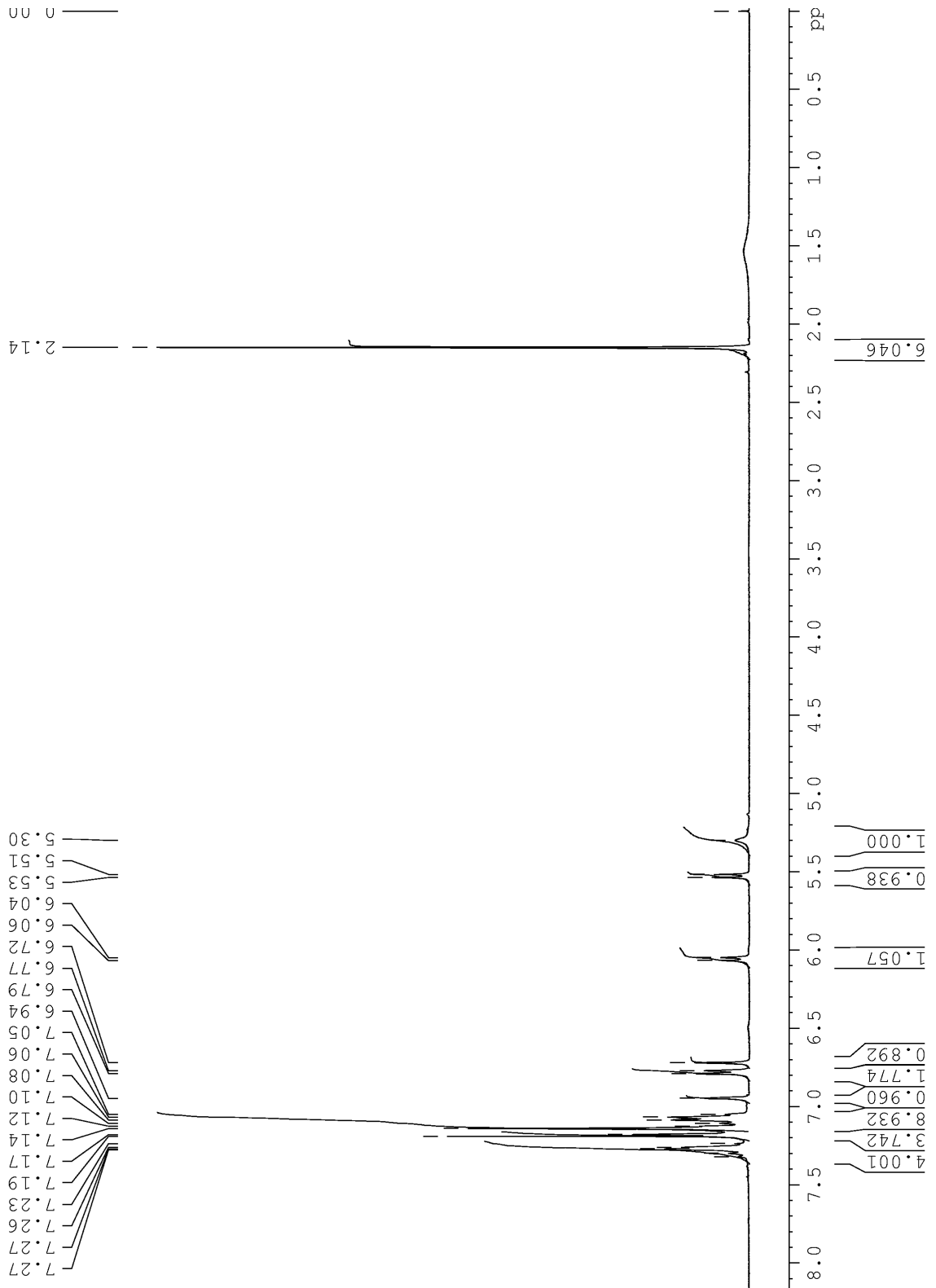
Ligand **7d**, ^{13}C NMR

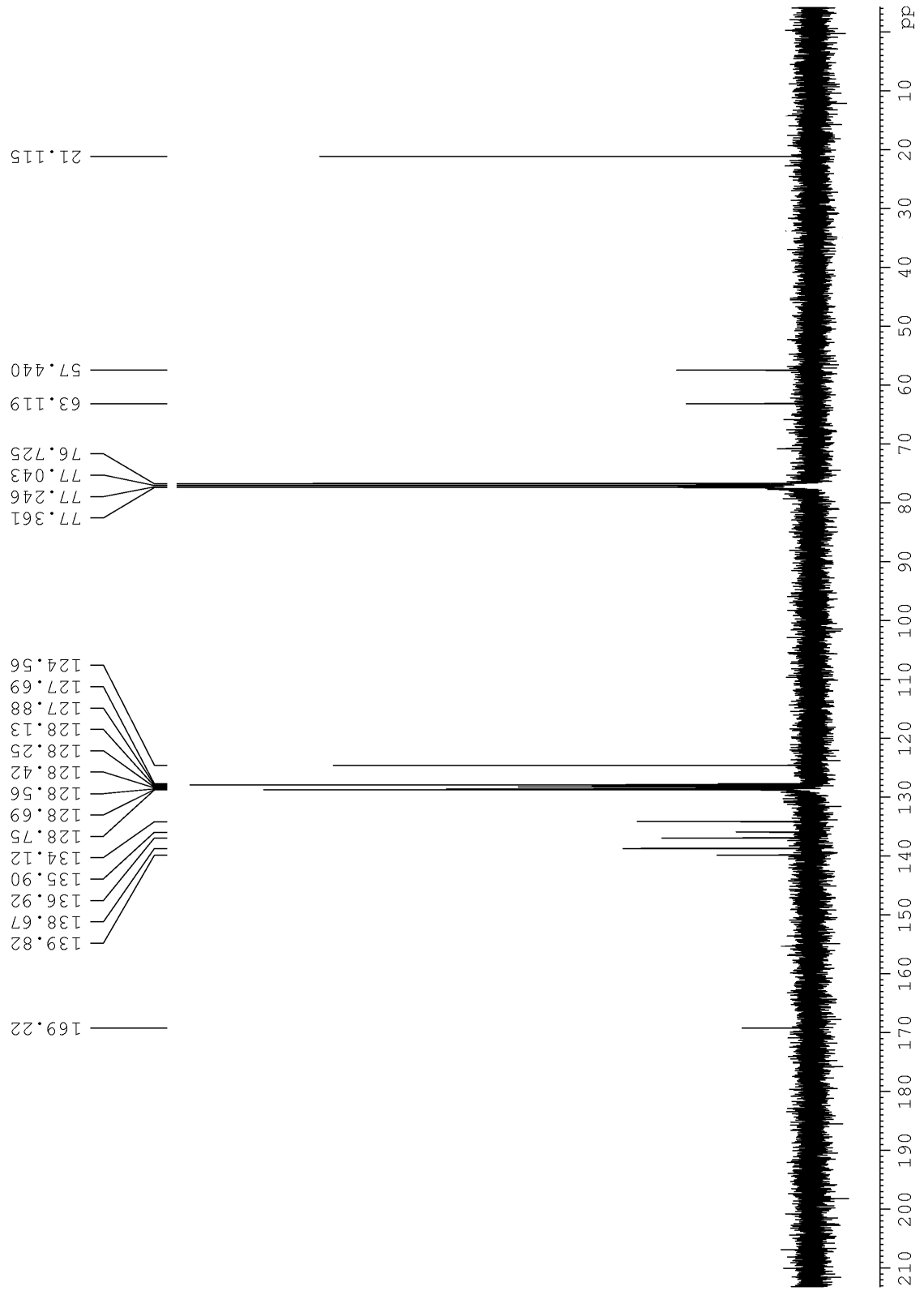
Ligand **8a**, ^1H NMR

Ligand **8a**, ^{13}C NMR

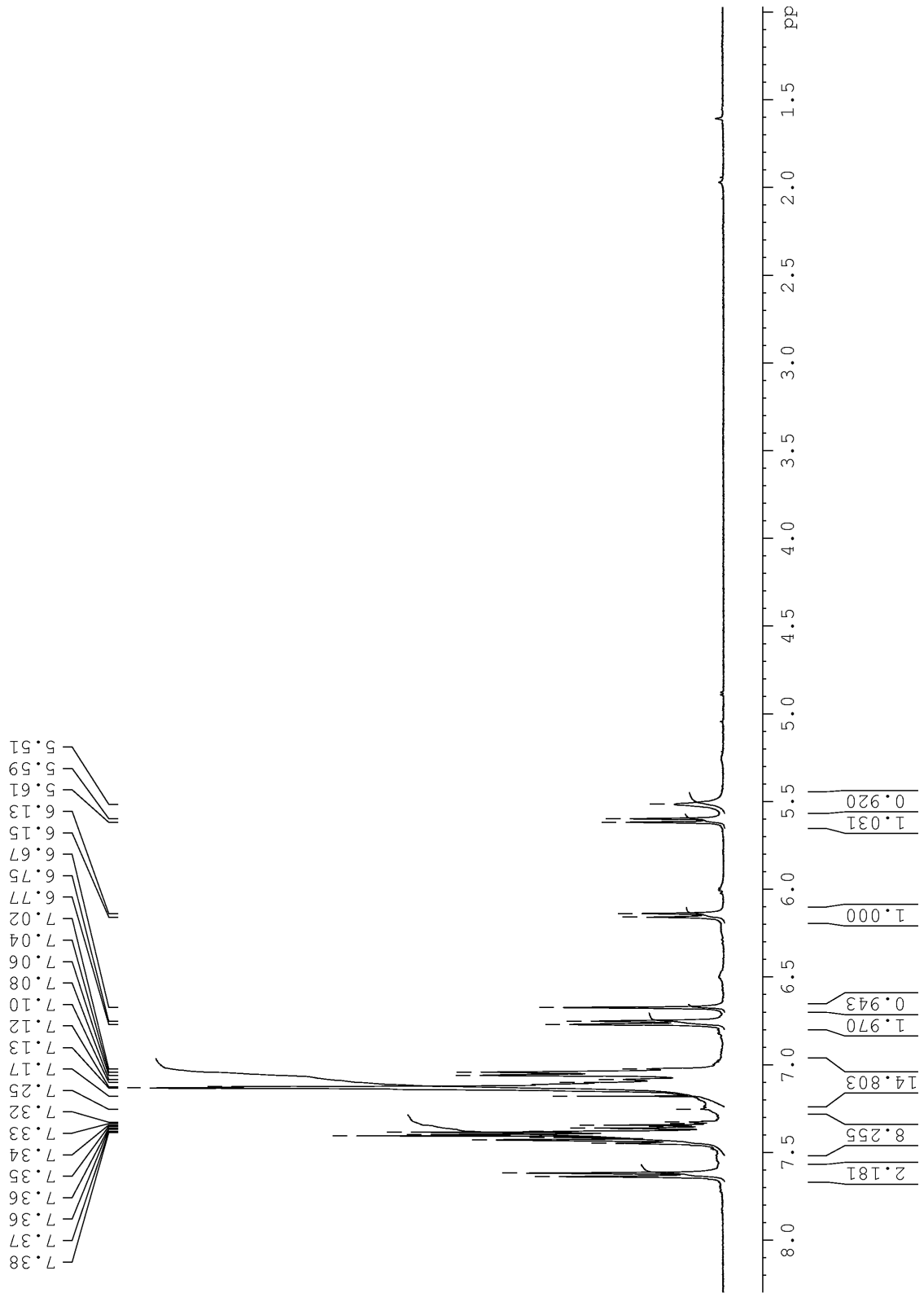
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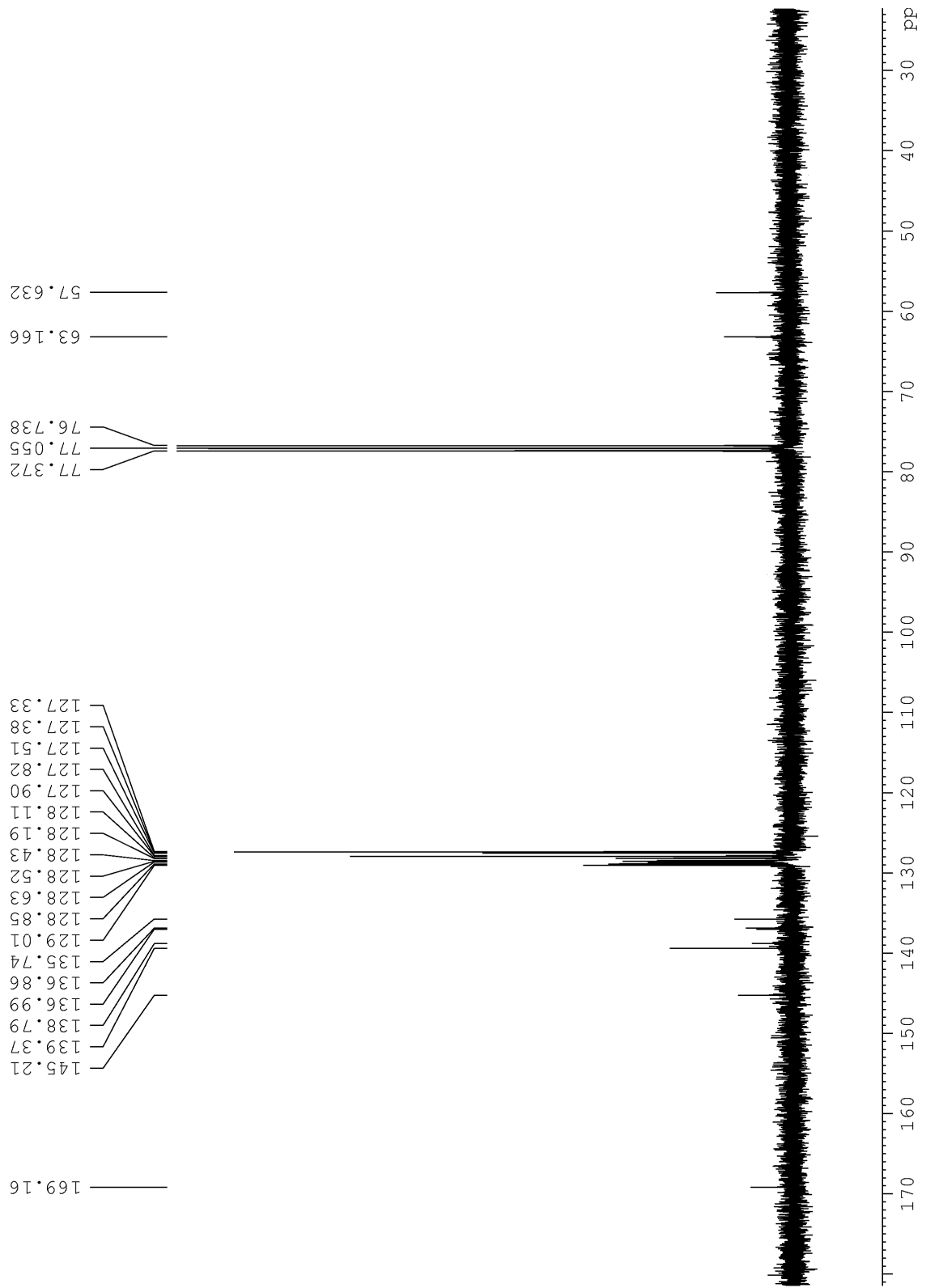
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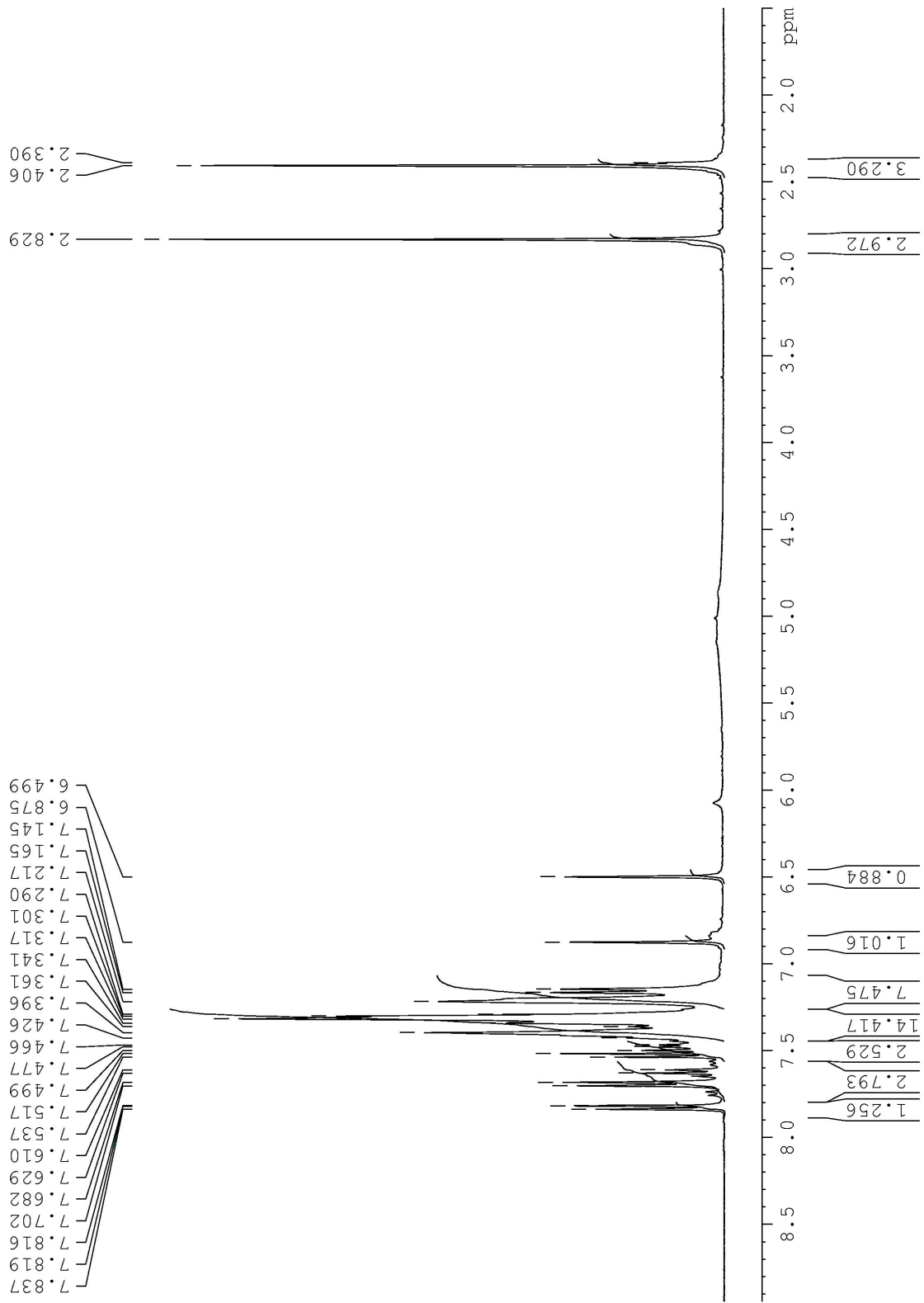
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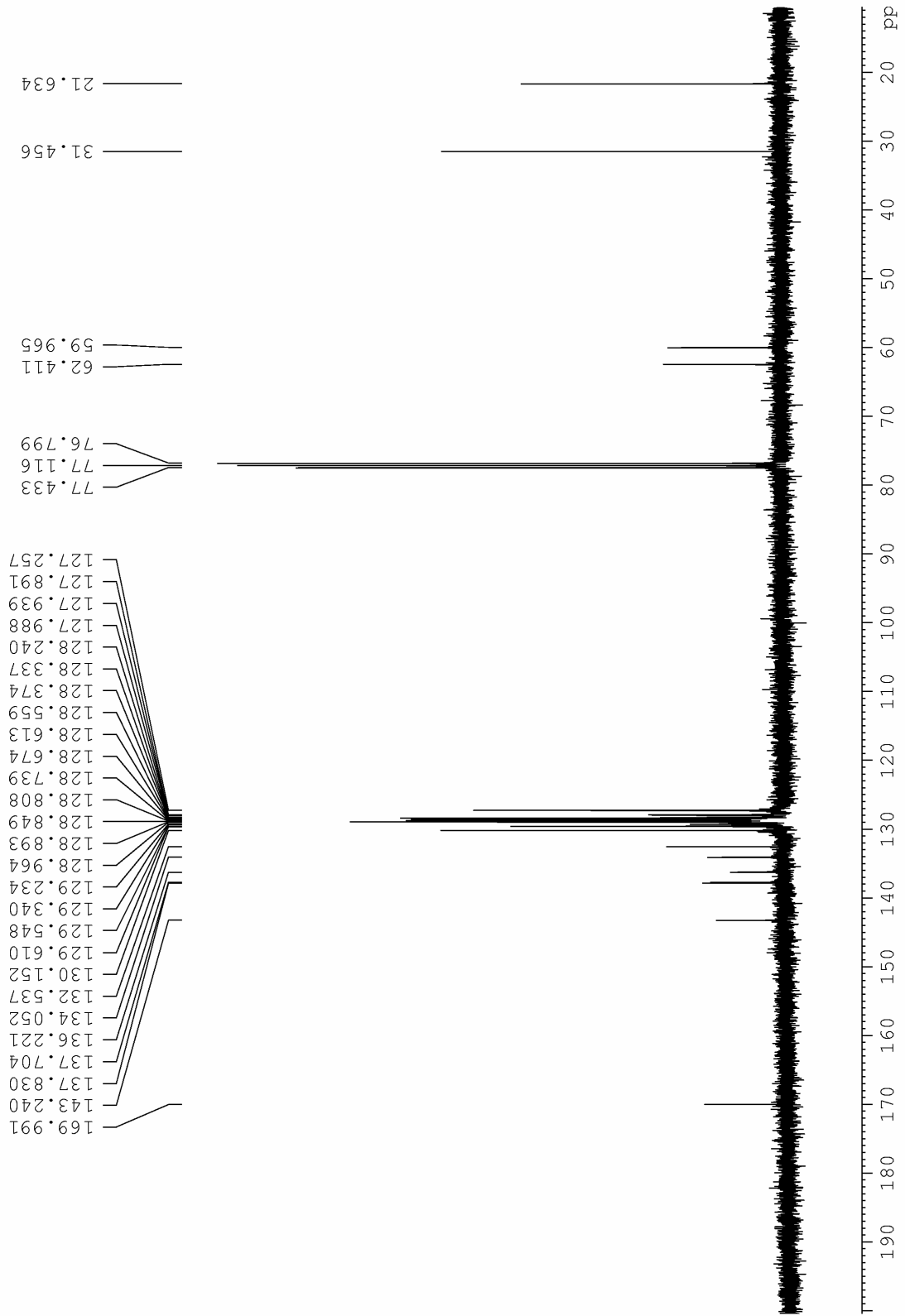
Ligand **8c**, ^{13}C NMR

Ligand **8d**, ¹H NMR

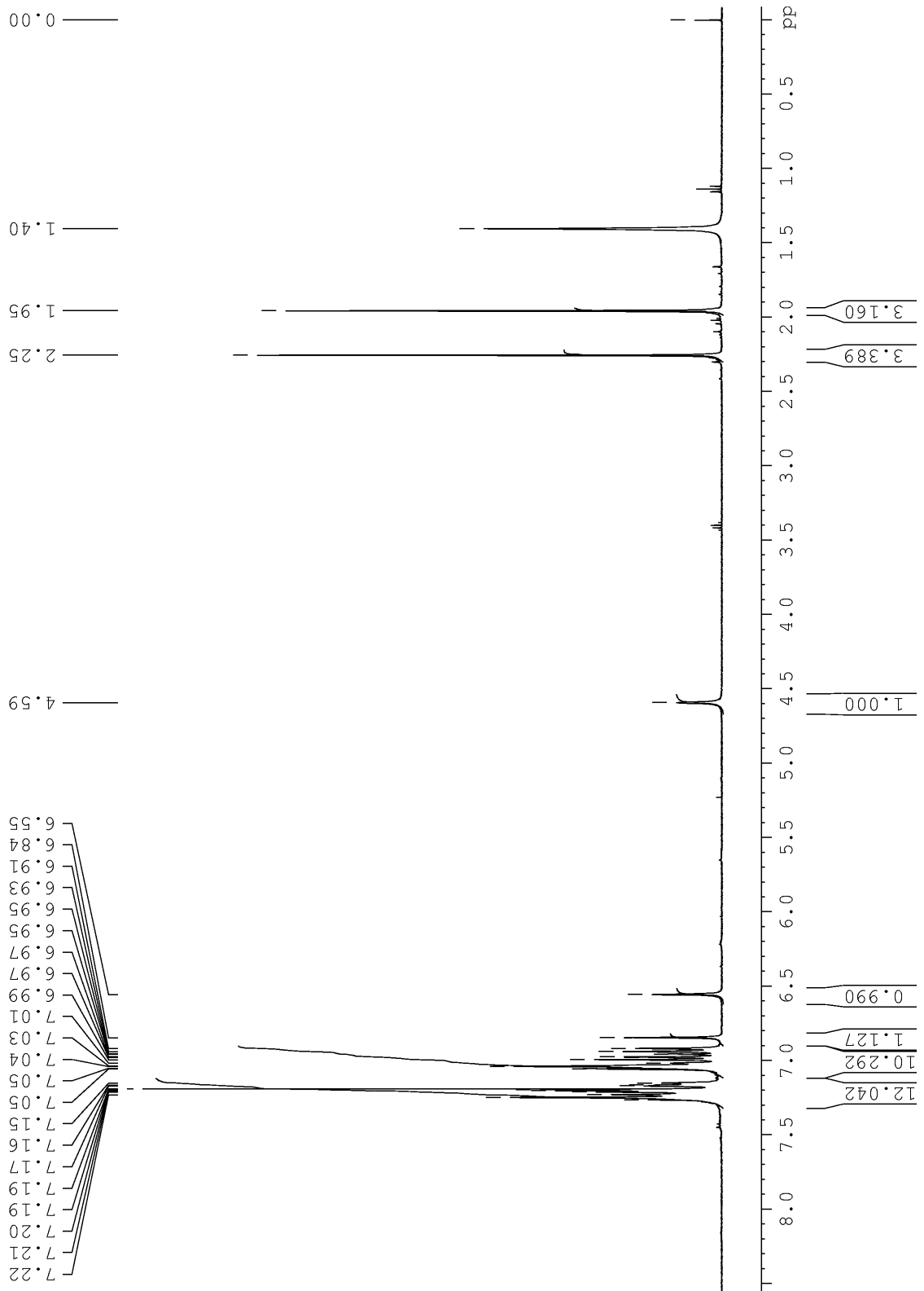


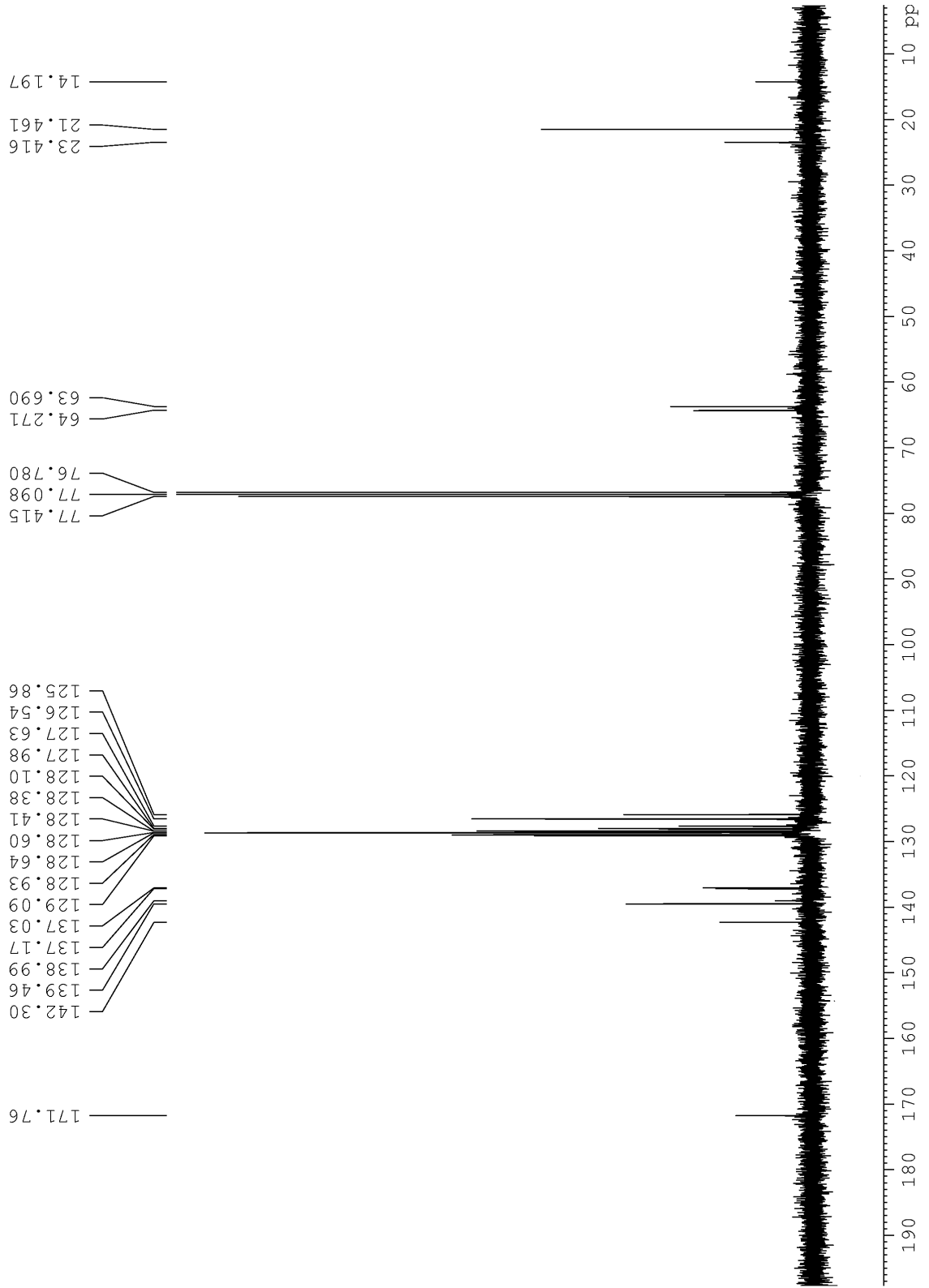
Ligand **8d**, ^{13}C NMR

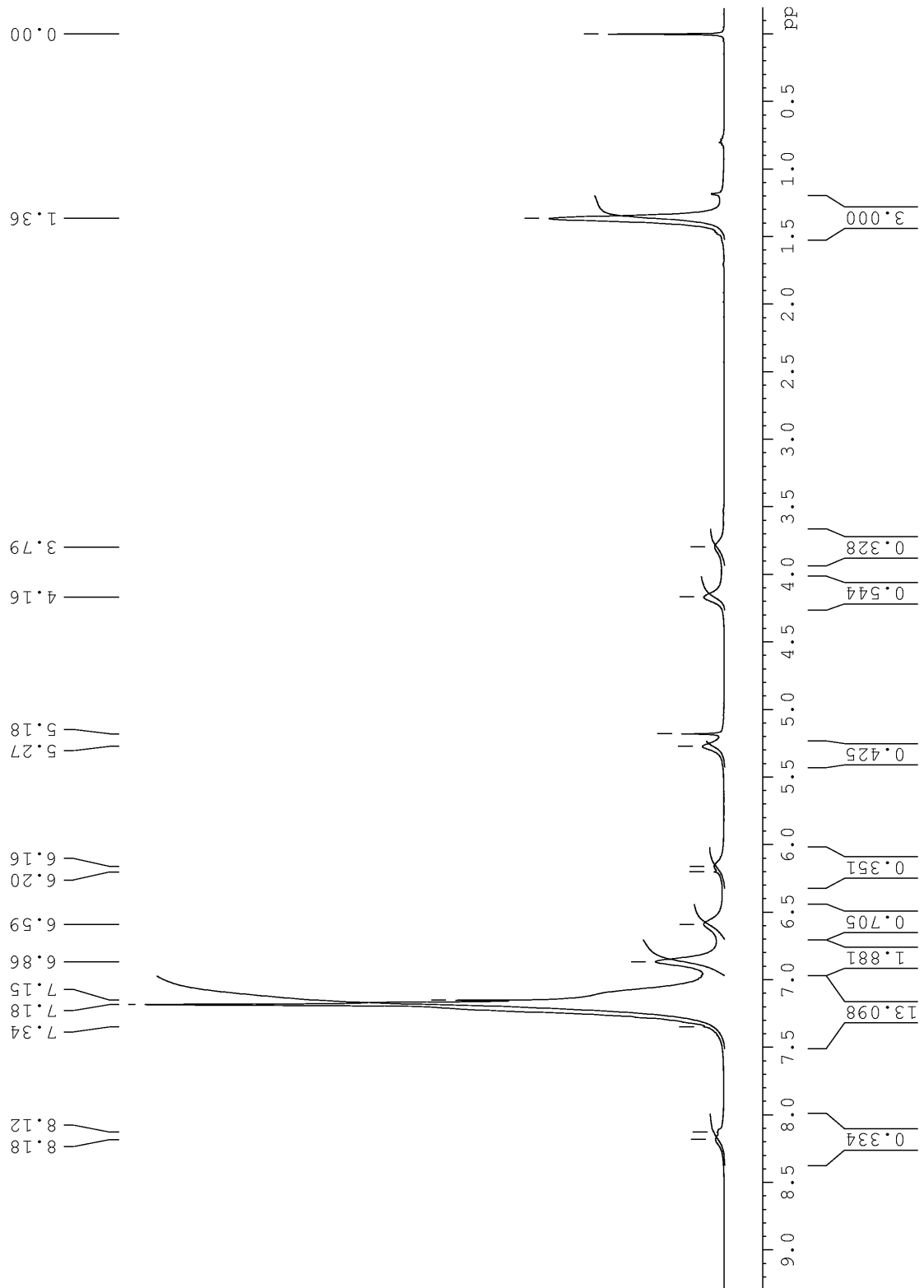
Ligand **9**, ^1H NMR

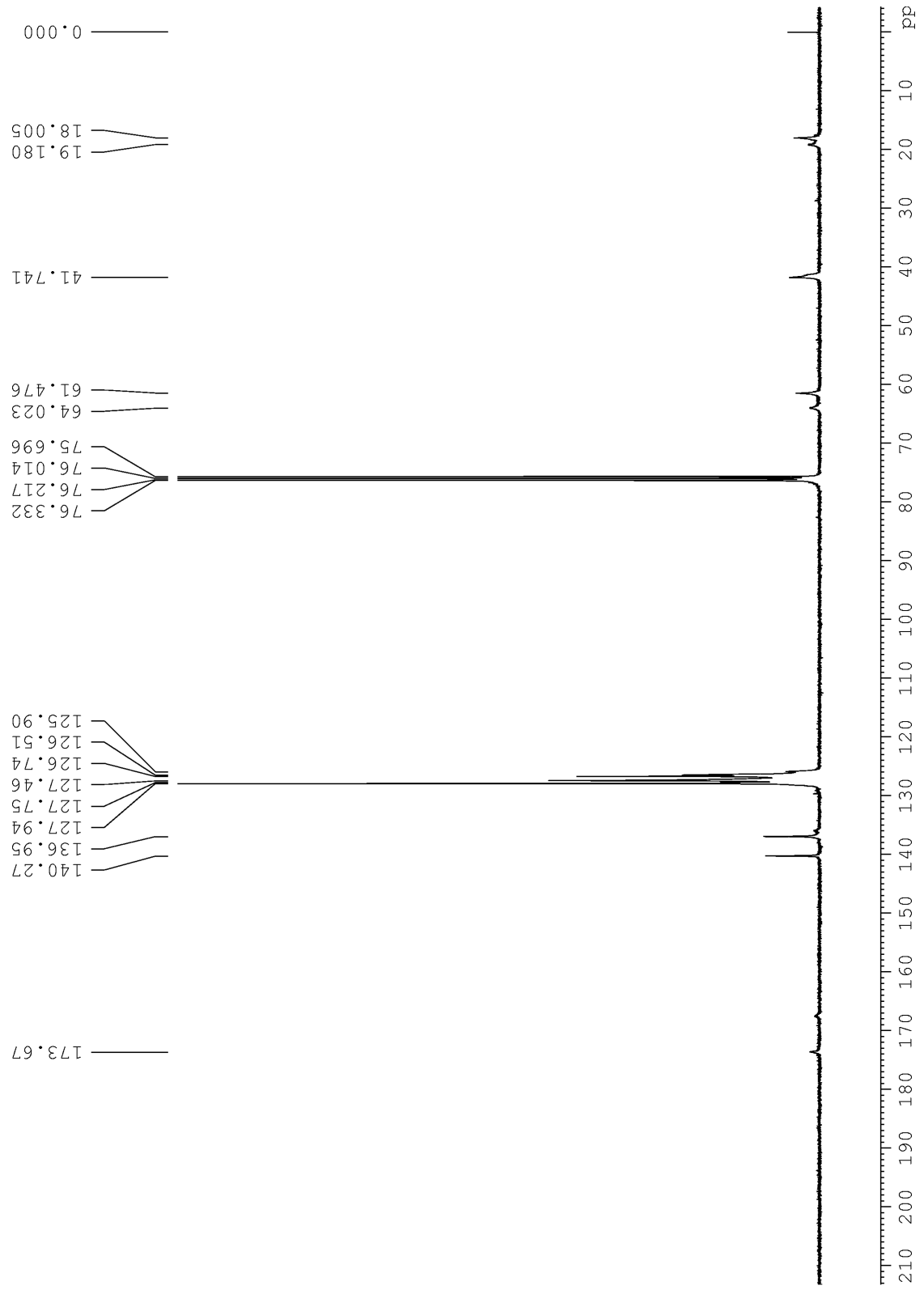
Ligand **9**, ^{13}C NMR

Ligand **10**, ^1H NMR



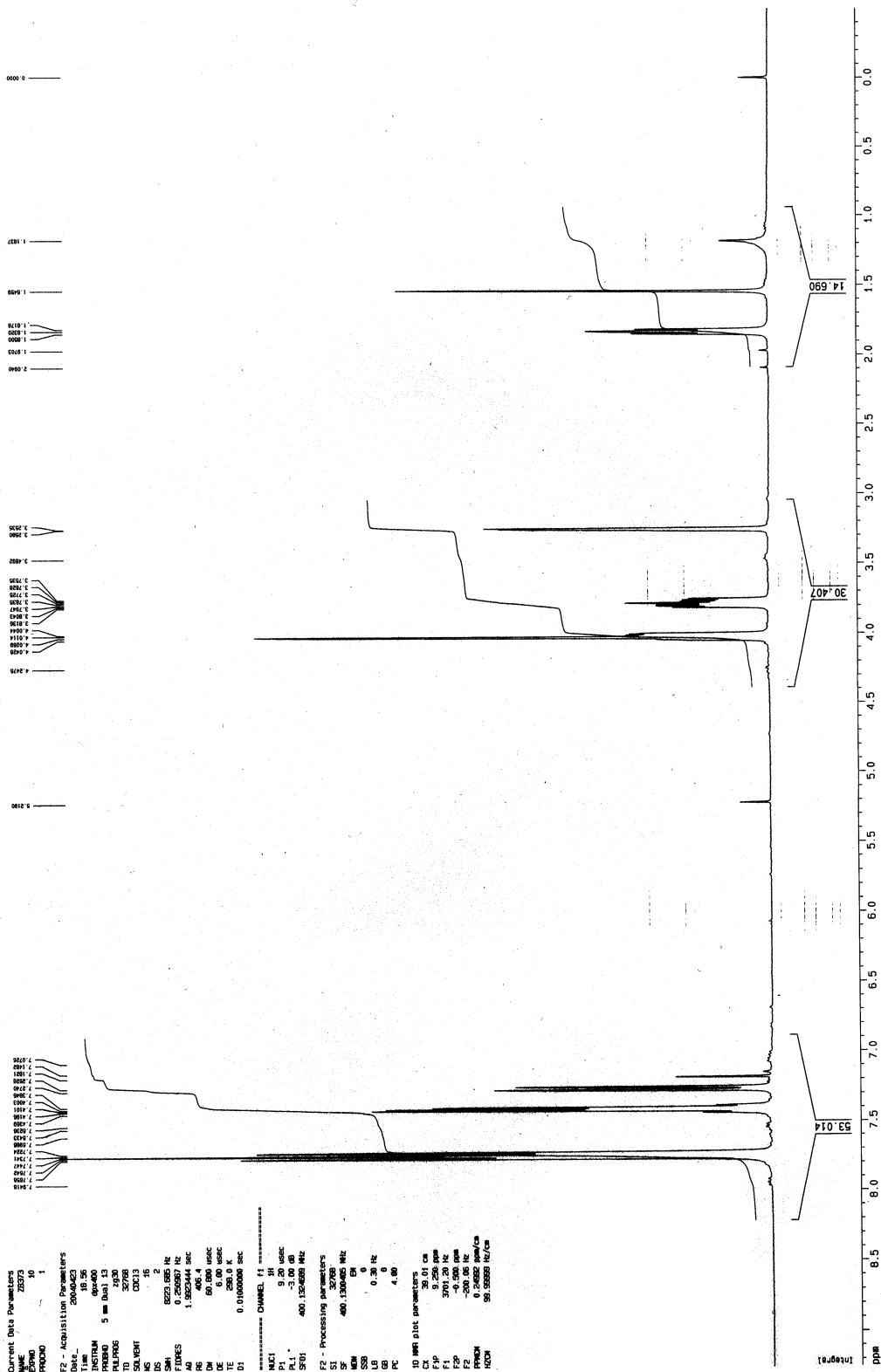
Ligand **10**, ^{13}C NMR

Ligand **11**, ^1H NMR

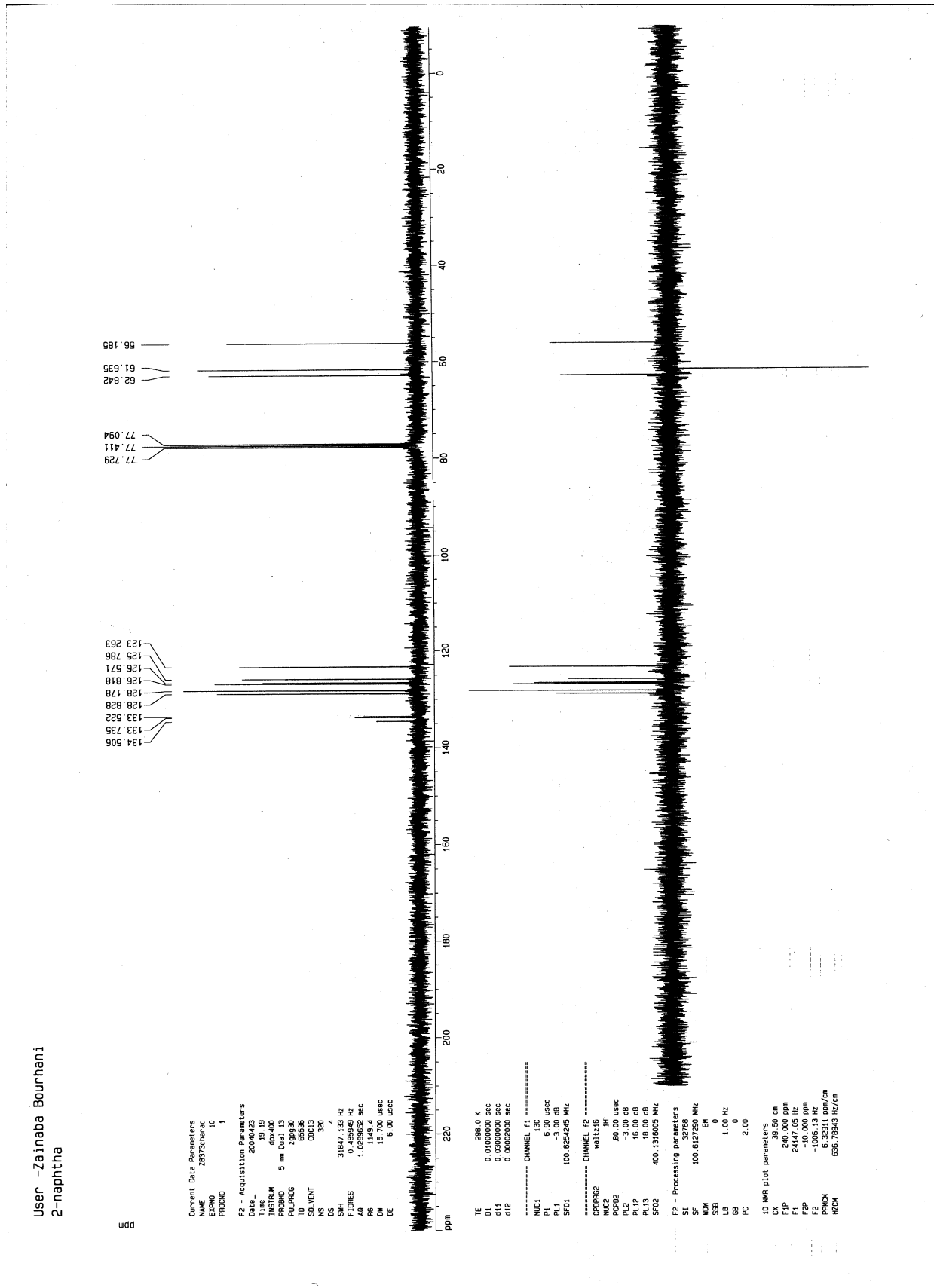
Ligand **11**, ^{13}C NMR

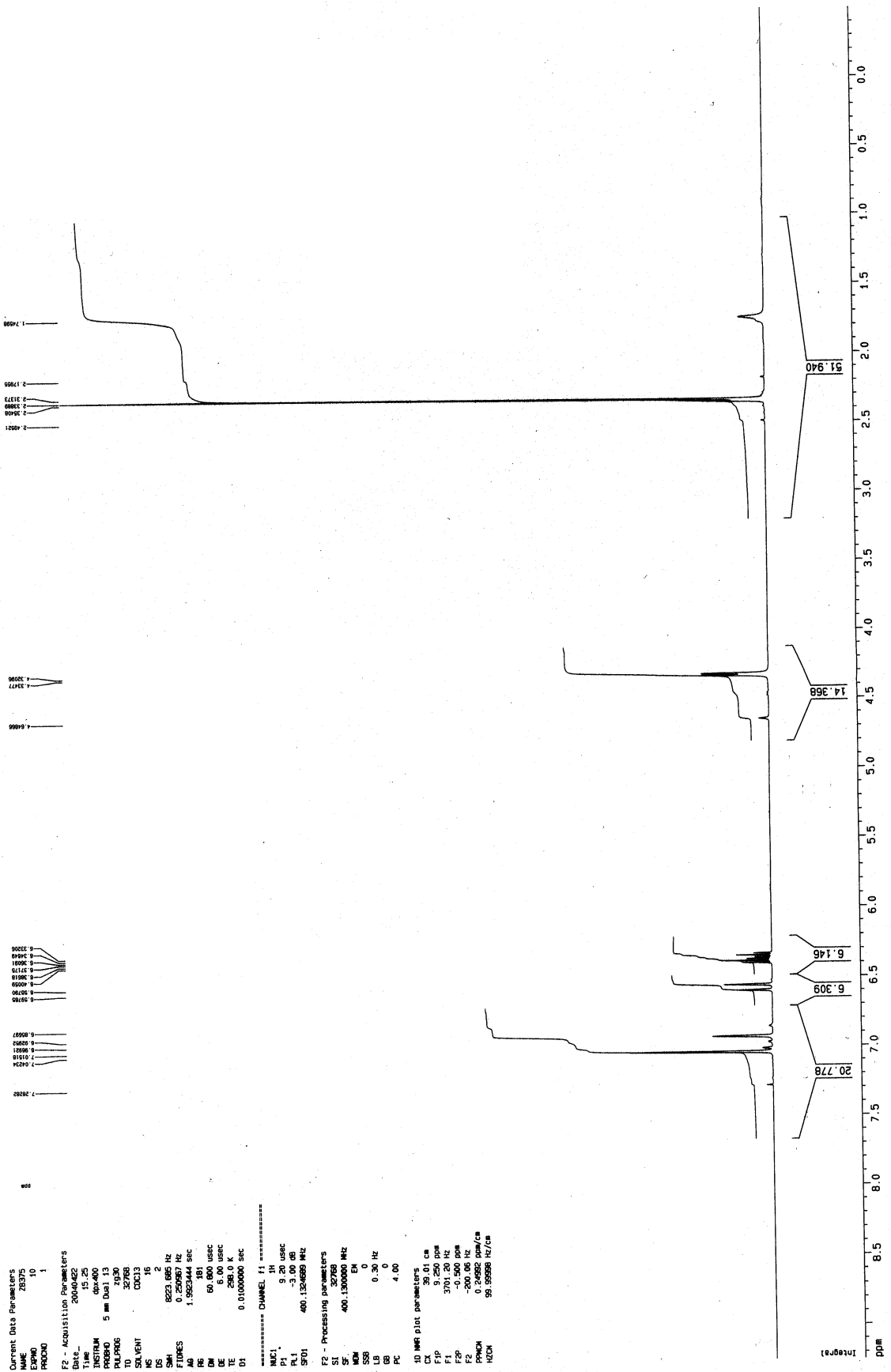
Epoxide from allylic alcohol 27, ¹H NMR

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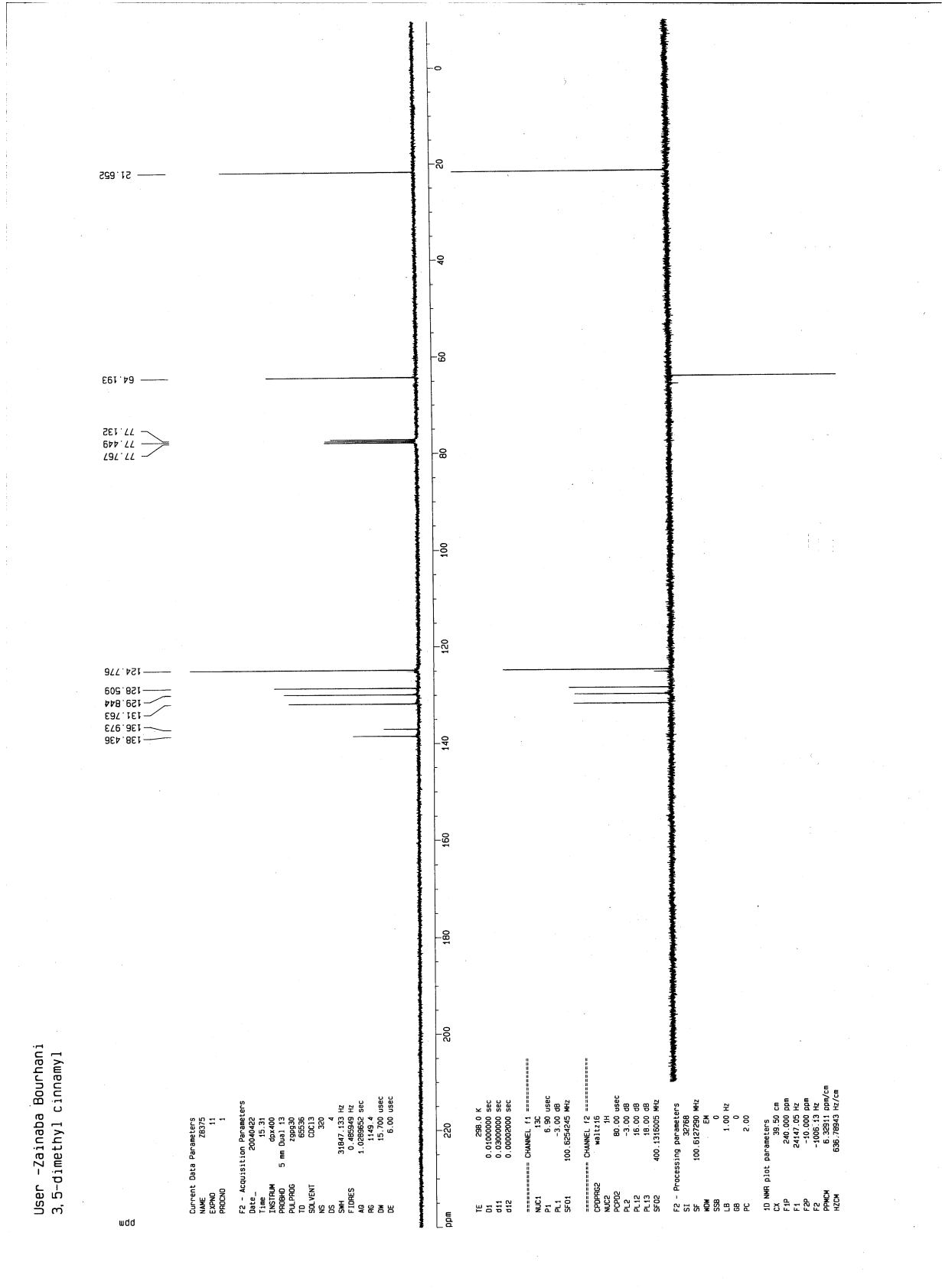


Epoxide from allylic alcohol 27, ¹³C NMR

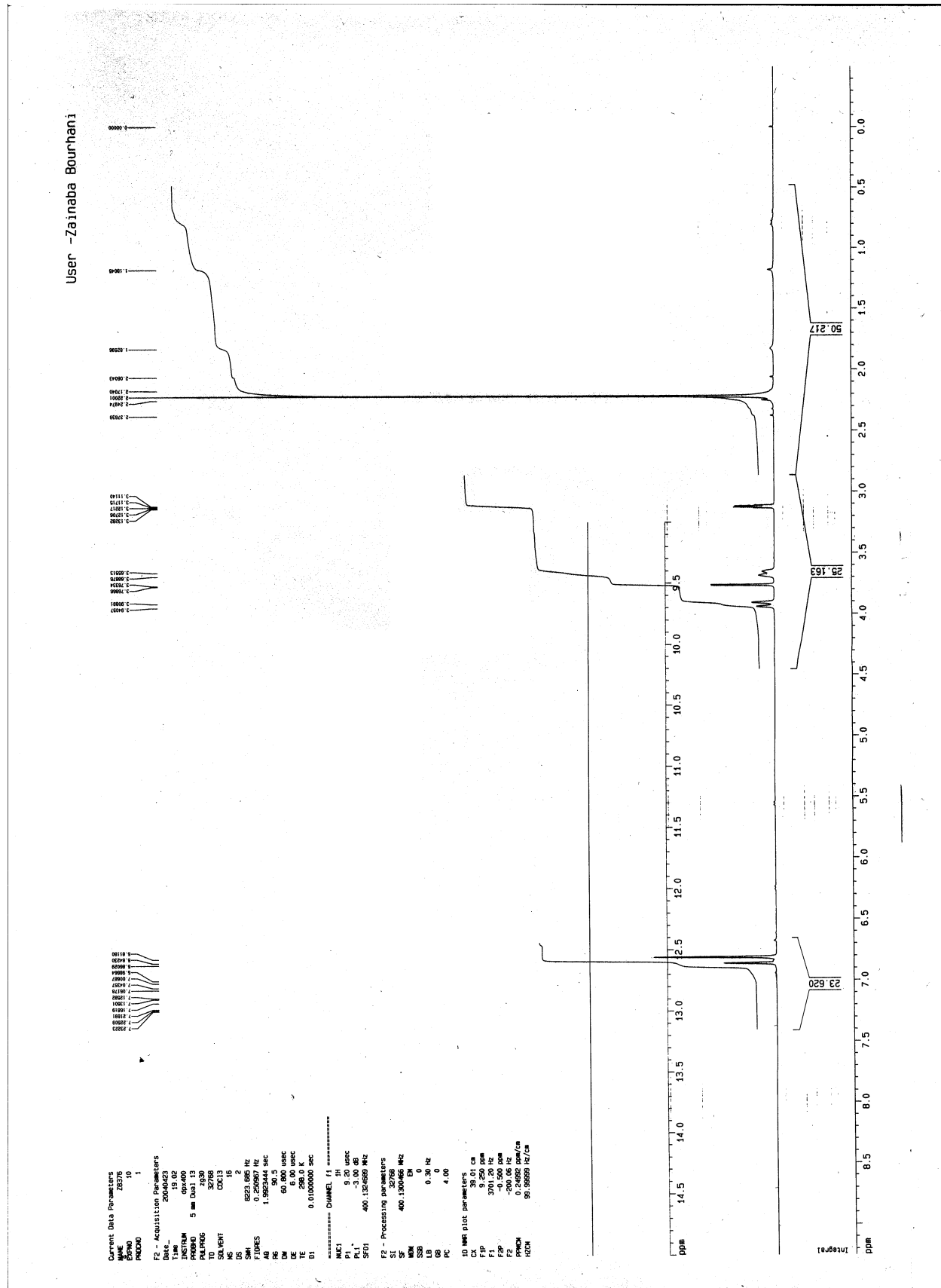


3',5'-Dimethylcinnamyl alcohol **29**, ¹H NMR

3',5'-Dimethylcinnamyl alcohol 29, ¹³C NMR

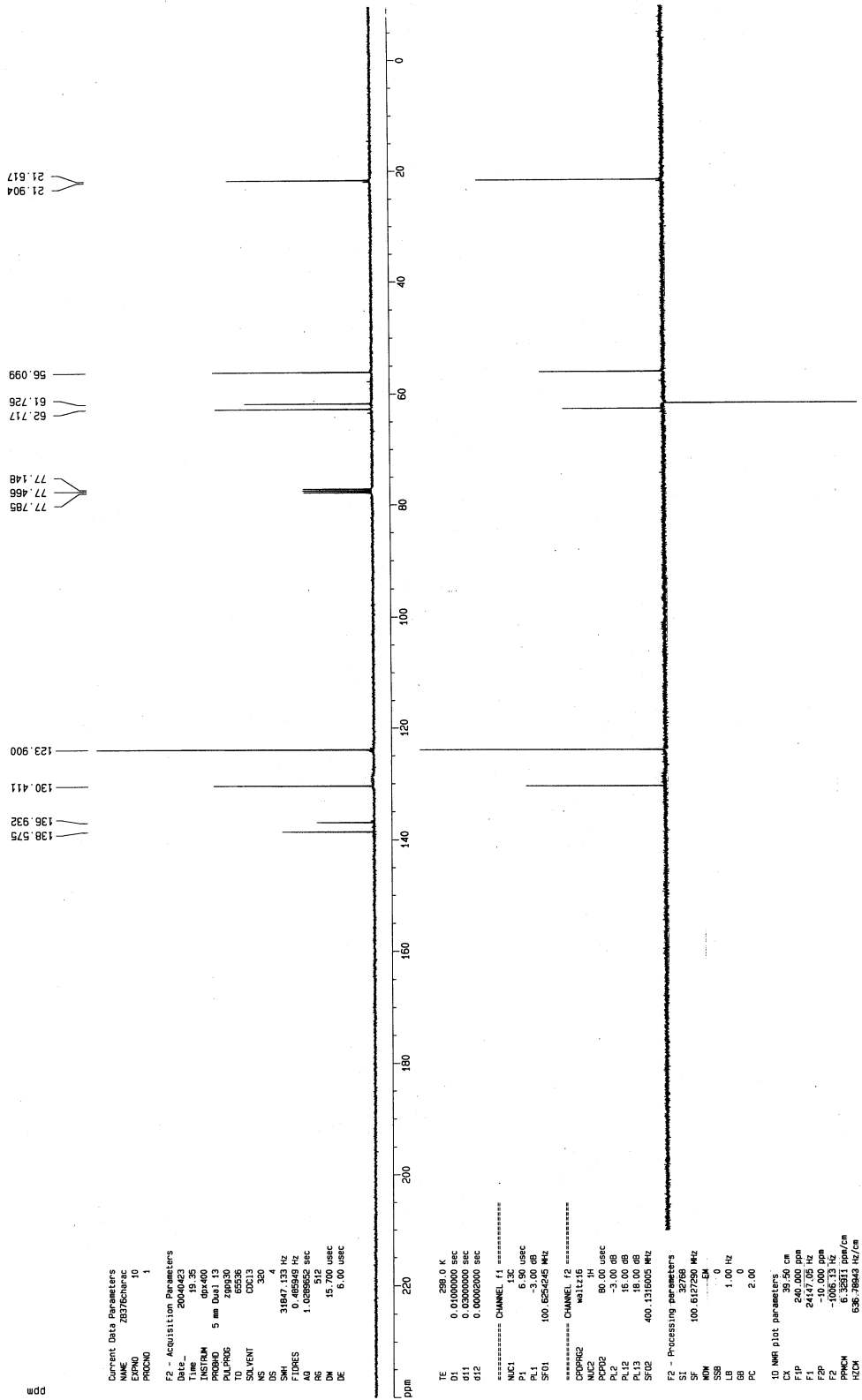


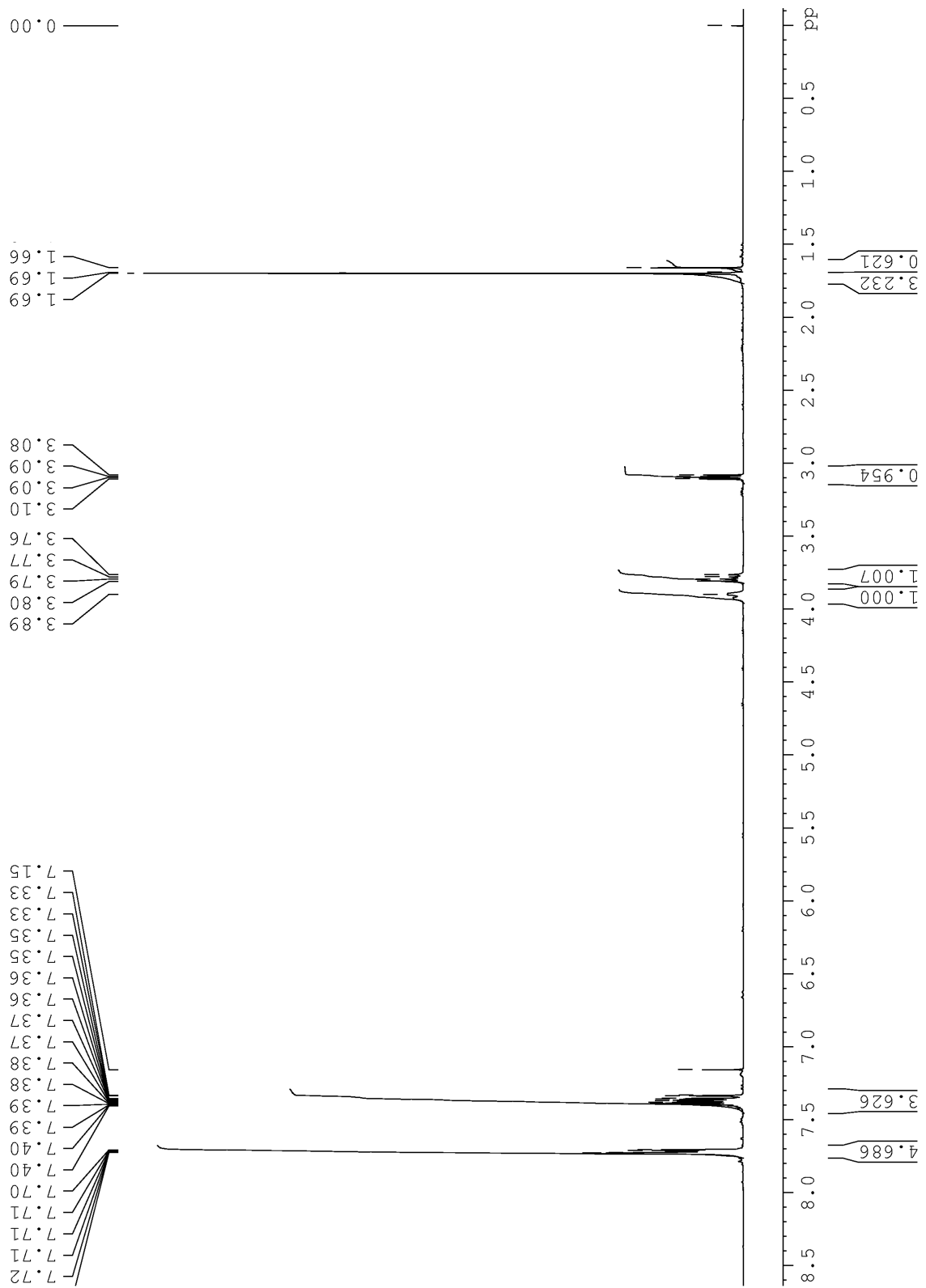
Epoxide from allylic alcohol 29, ¹H NMR



Epoxide from allylic alcohol 29, ¹³C NMR

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3, 5-dimethyl



Epoxide from allylic alcohol **31**, ^1H NMR

Epoxide from allylic alcohol **31**, ^{13}C NMR