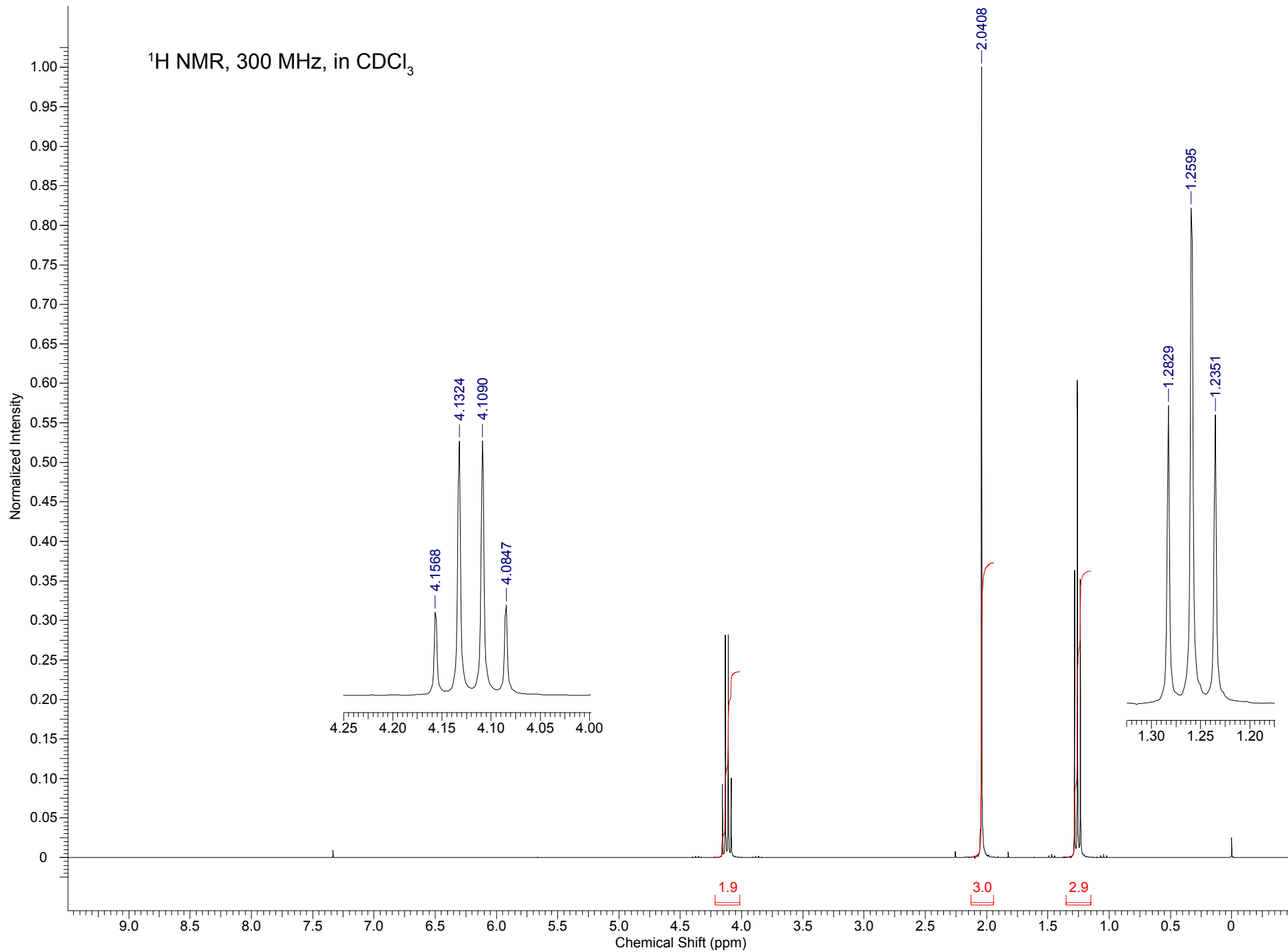


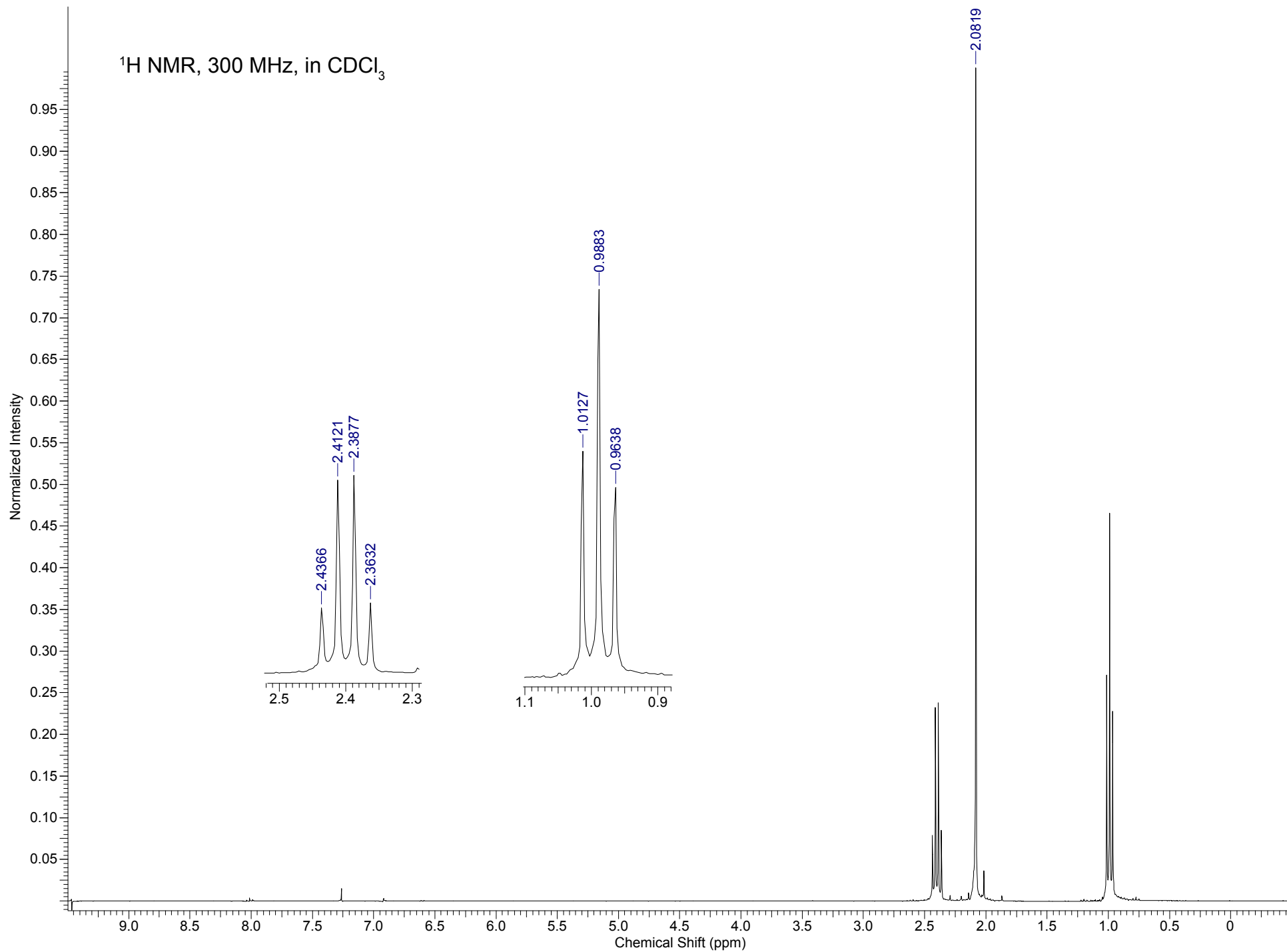
**Discussion Section Exercise:  
Simple NMR Assignments**

The NMR spectra on the following pages each correspond to molecules that contain only carbon, hydrogen, nitrogen and oxygen. Each spectrum shows both a full-width spectrum and close-ups of splitting patterns. What molecules might these spectra correspond to? What explains the splitting patterns of each multiplet you see?

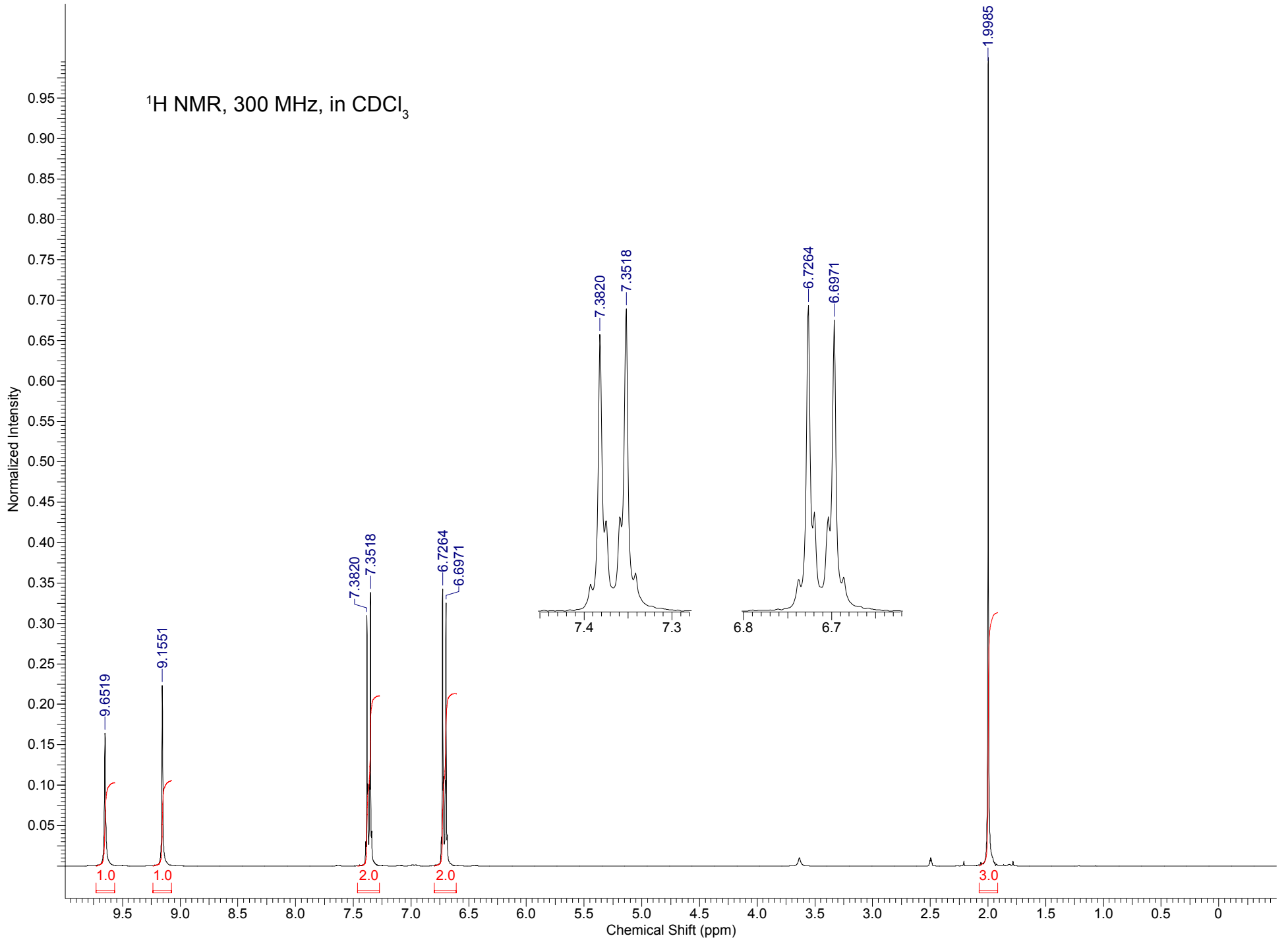
$^1\text{H}$  NMR, 300 MHz, in  $\text{CDCl}_3$

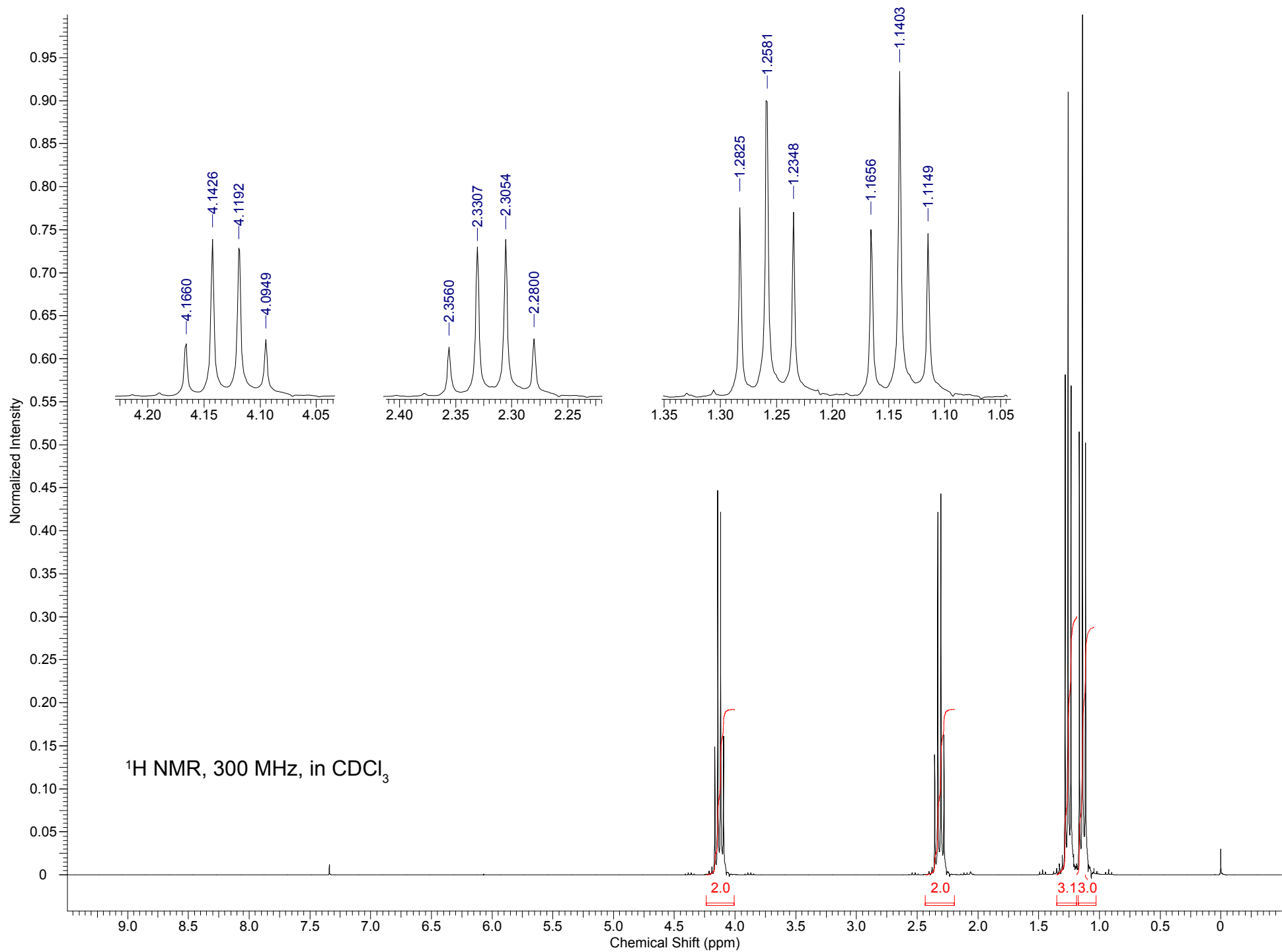


$^1\text{H}$  NMR, 300 MHz, in  $\text{CDCl}_3$



$^1\text{H}$  NMR, 300 MHz, in  $\text{CDCl}_3$





$^1\text{H}$  NMR, 300 MHz, in  $\text{CDCl}_3$

