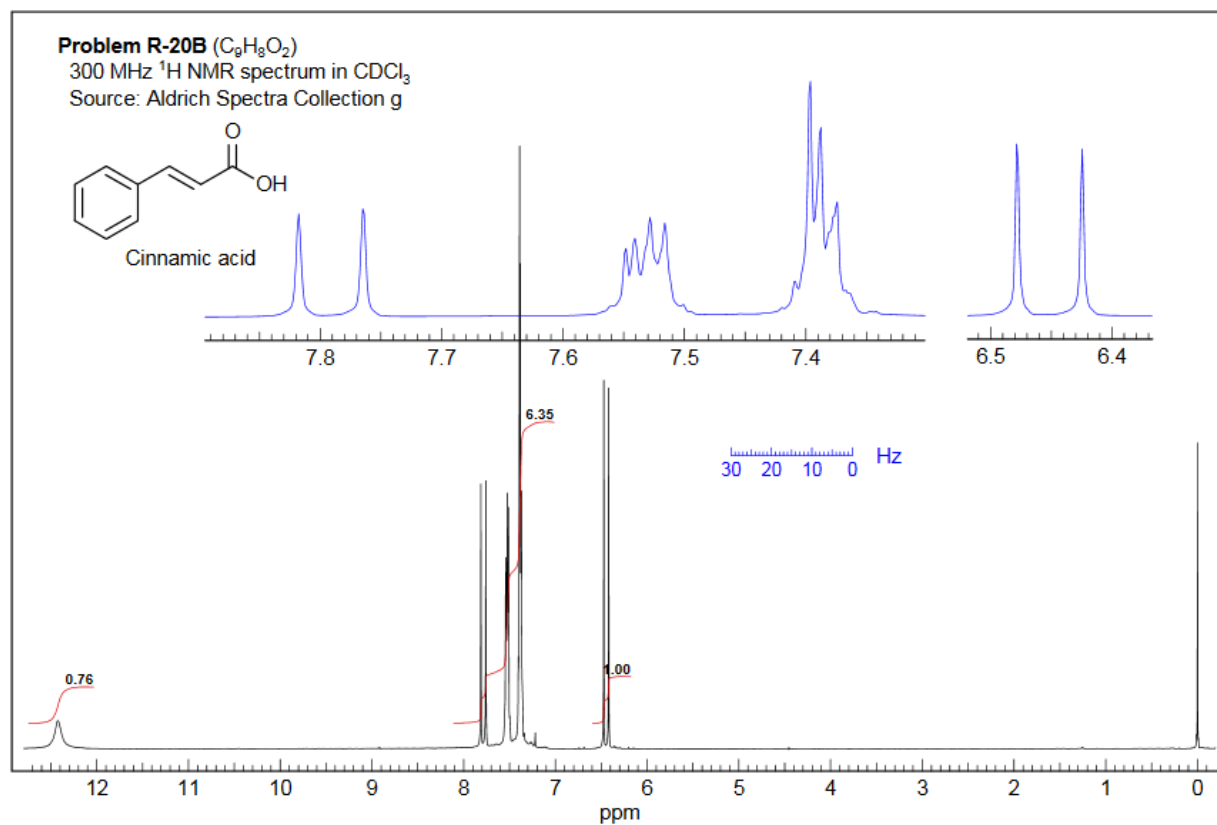
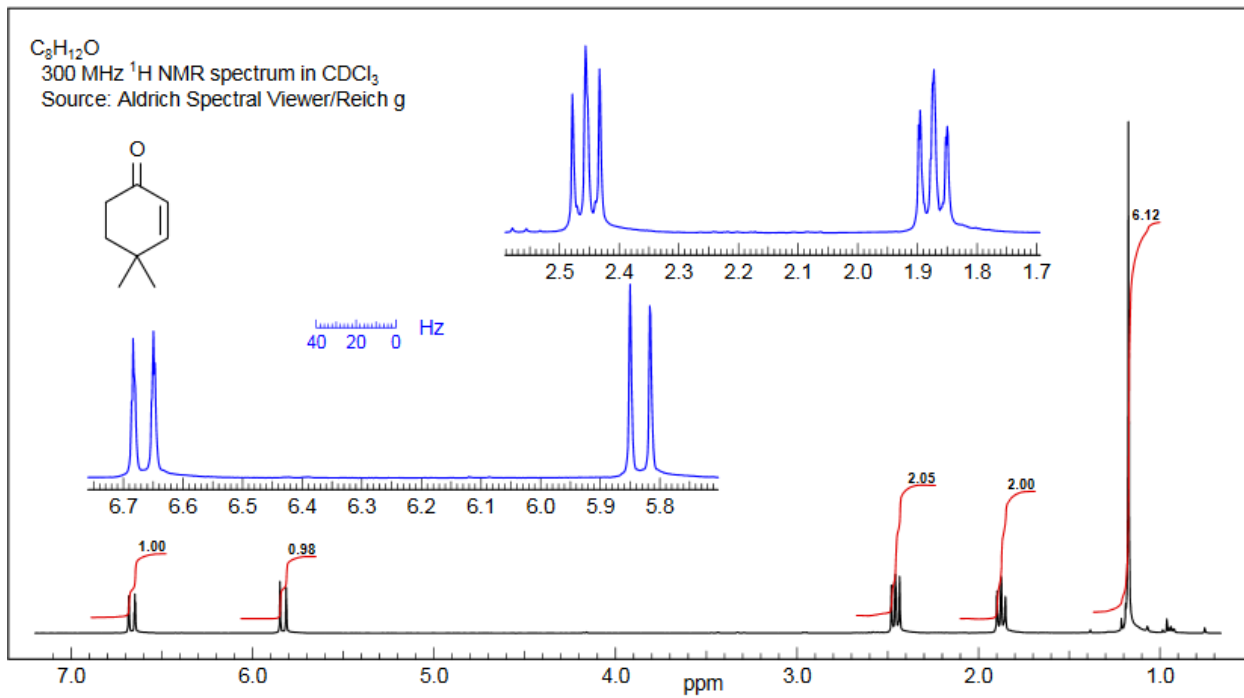
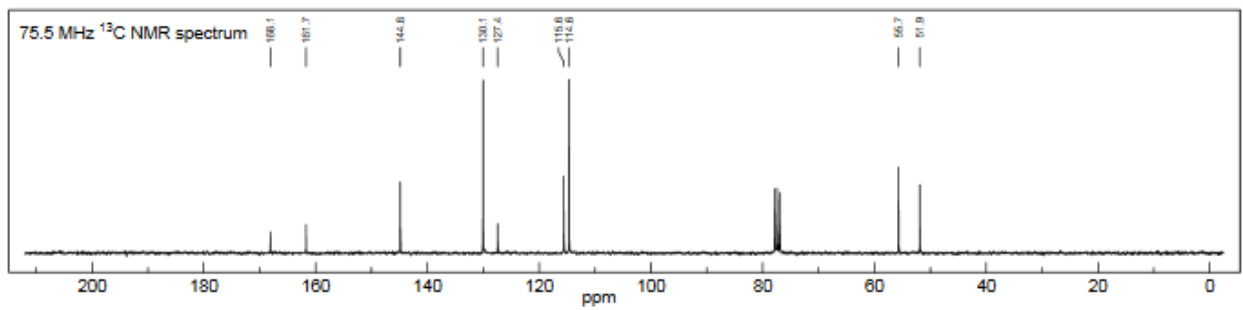
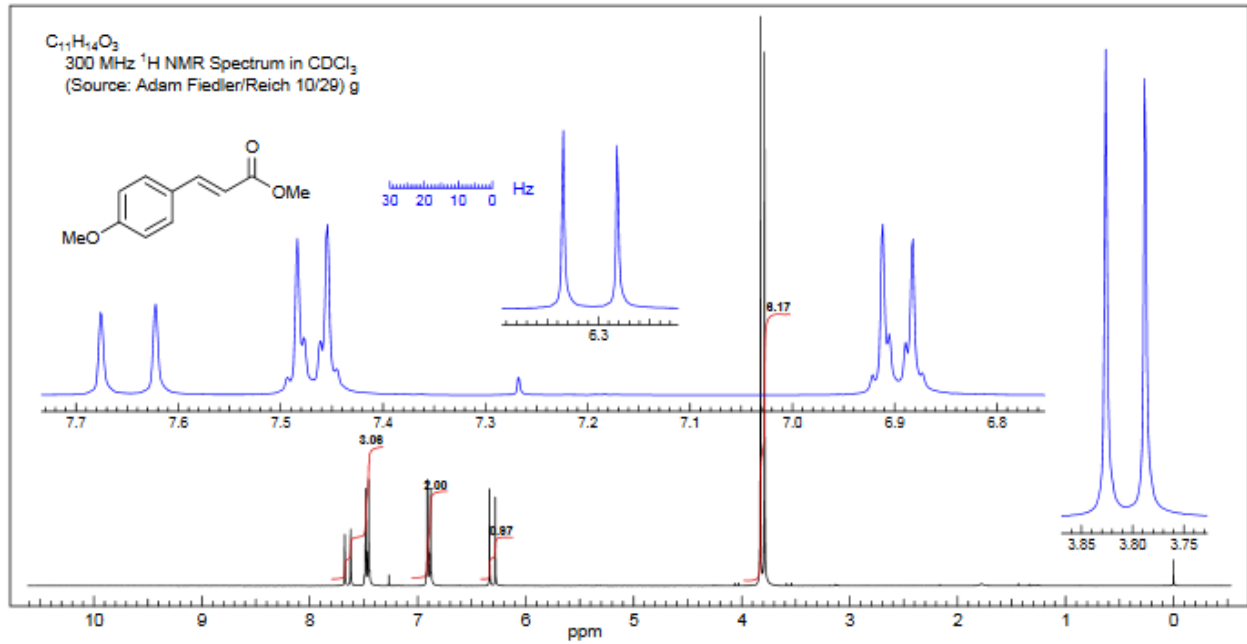
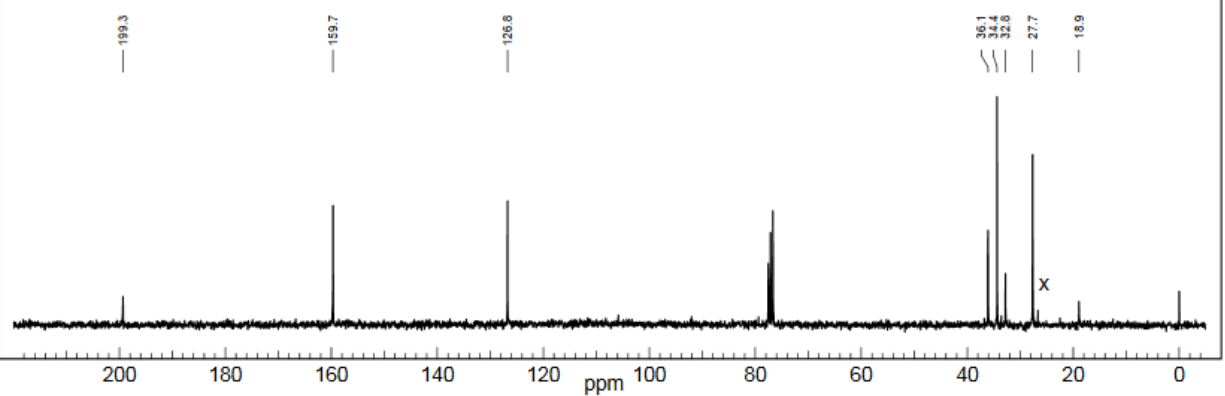


## Problem # 11

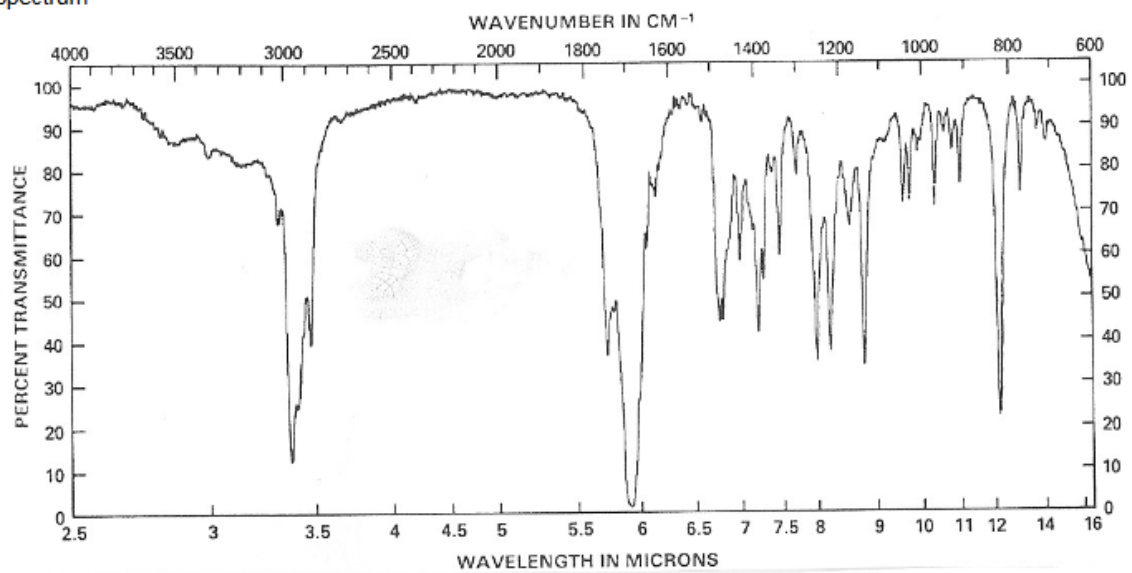




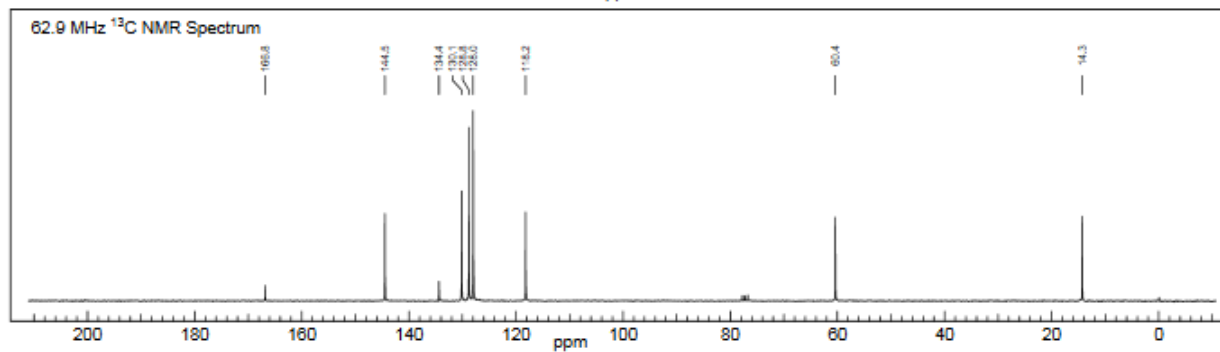
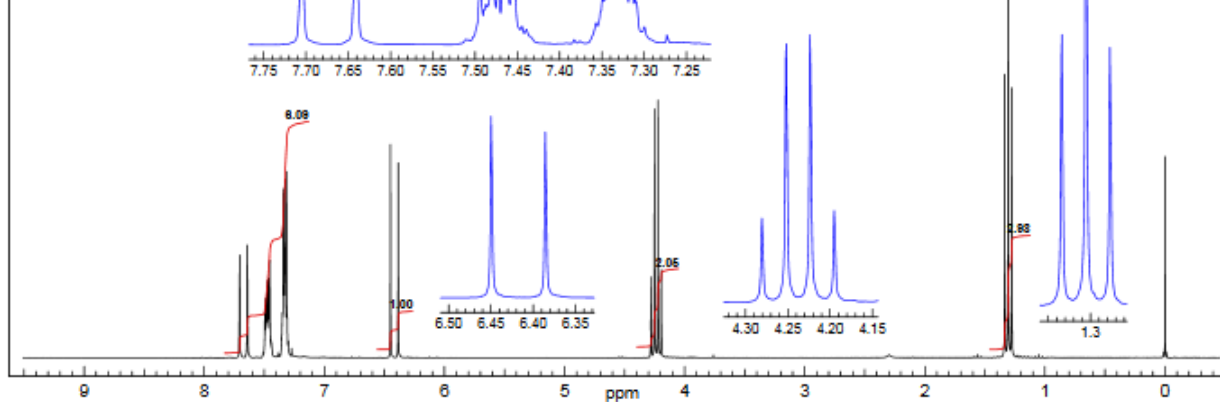
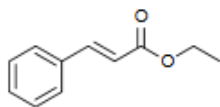
$C_8H_{12}O$   
75 MHz  $^{13}C$  NMR spectrum in  $CDCl_3$   
Source: Aldrich Spectral Viewer/Reich



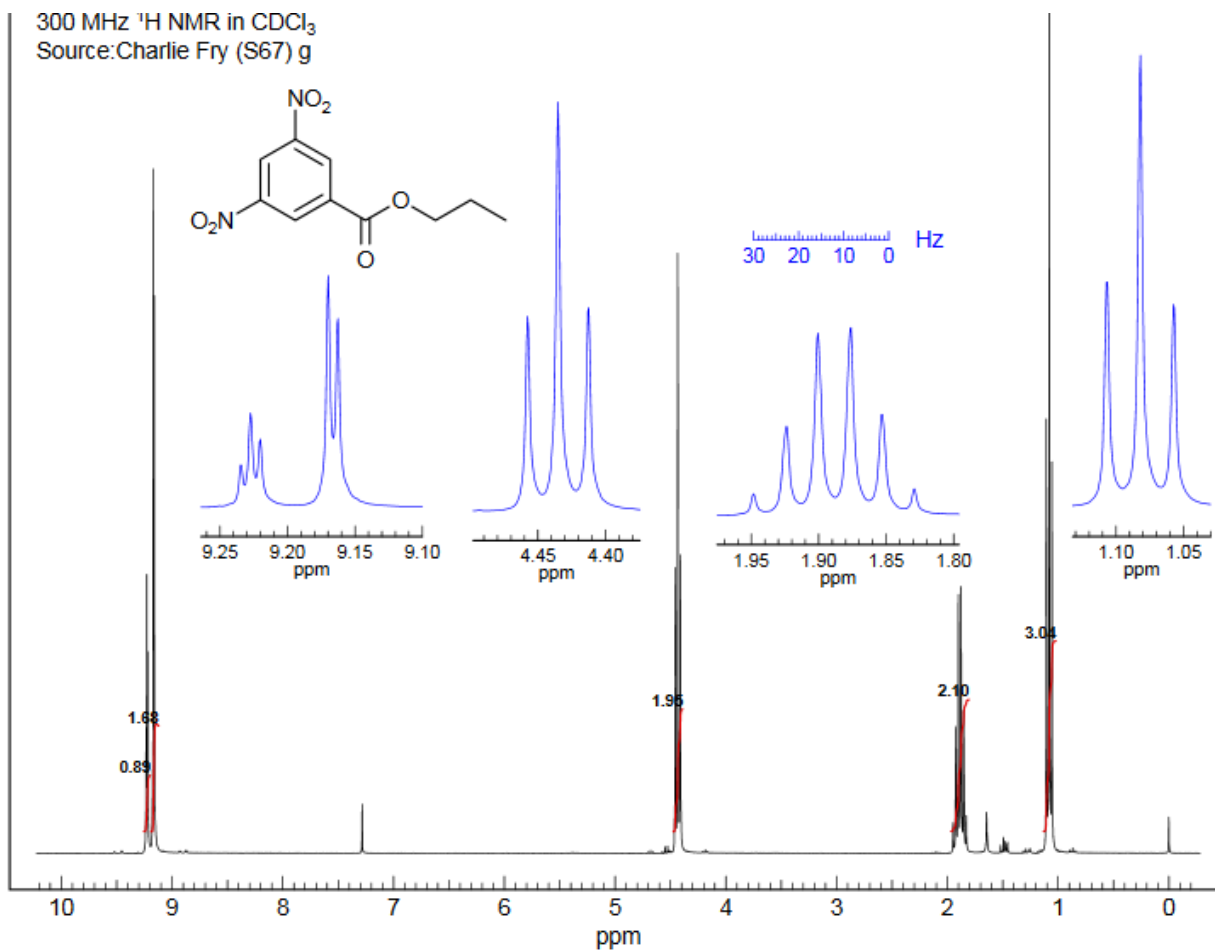
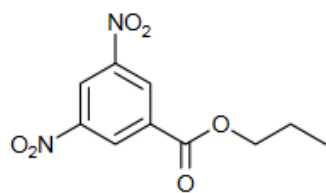
IR spectrum



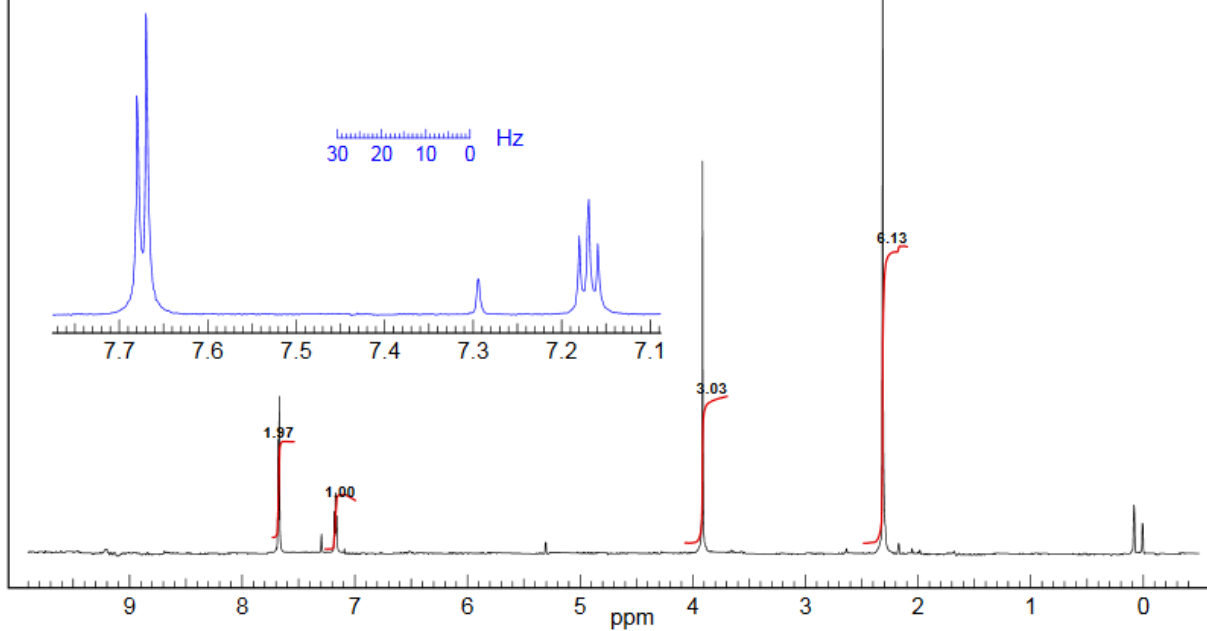
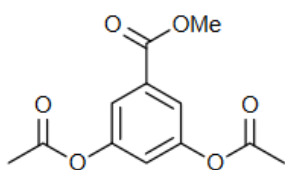
Problem R-99C (C<sub>11</sub>H<sub>12</sub>O<sub>2</sub>).  
250 MHz <sup>1</sup>H NMR Spectrum in CDCl<sub>3</sub>  
Source: Adam Fiedler/Reich 10/29 g



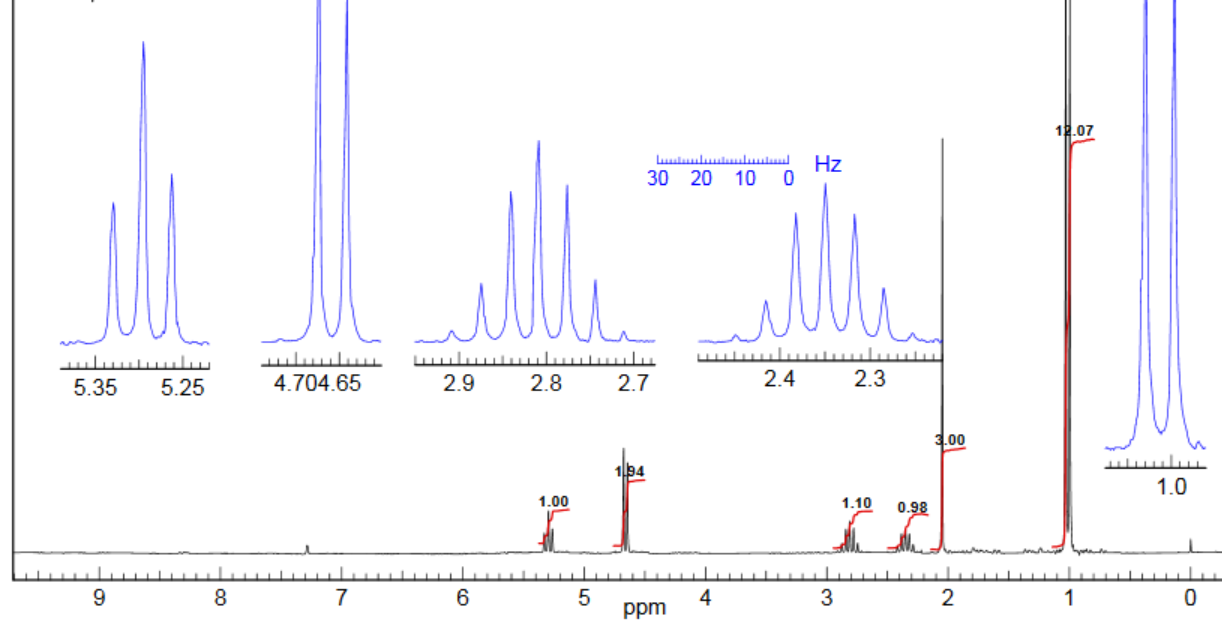
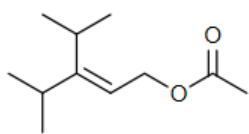
300 MHz <sup>1</sup>H NMR in CDCl<sub>3</sub>  
Source: Charlie Fry (S67) g



Source: Craig Puckett/Reich (digitized hard copy) g



200 MHz  $^1\text{H}$  NMR spectrum  
Source: Robert Dykstra/Reich (digitized hard copy) g



$\text{C}_{11}\text{H}_{20}\text{O}_2$   
90.6 MHz  $^{13}\text{C}$  NMR spectrum  
Source: Robert Dykstra/Reich (digitized hard copy) g

