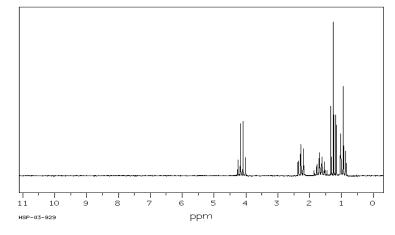
Organic II Lecture Spring 2012 Quiz #1 (10 points)

- 1. Why does a carbonyl (C=O) bond absorb at a higher wavenumber than an alkene (C=C) bond in IR spectroscopy? (1 points)
- 2. Draw a splitting tree for H_c in styrene. Indicate the correct coupling constants within 2 Hz. (Problem 13-12, 3 points)

3. Compound **A**, C₆H₁₂O₂, gave the following ¹H NMR spectrum. Provide a structure for compound **A**. Justify your answer through correlating your structure with the spectrum. (3 points)



4. Using the following IR and mass spectra, propose a possible structure for the unknown compound. (3 points)

