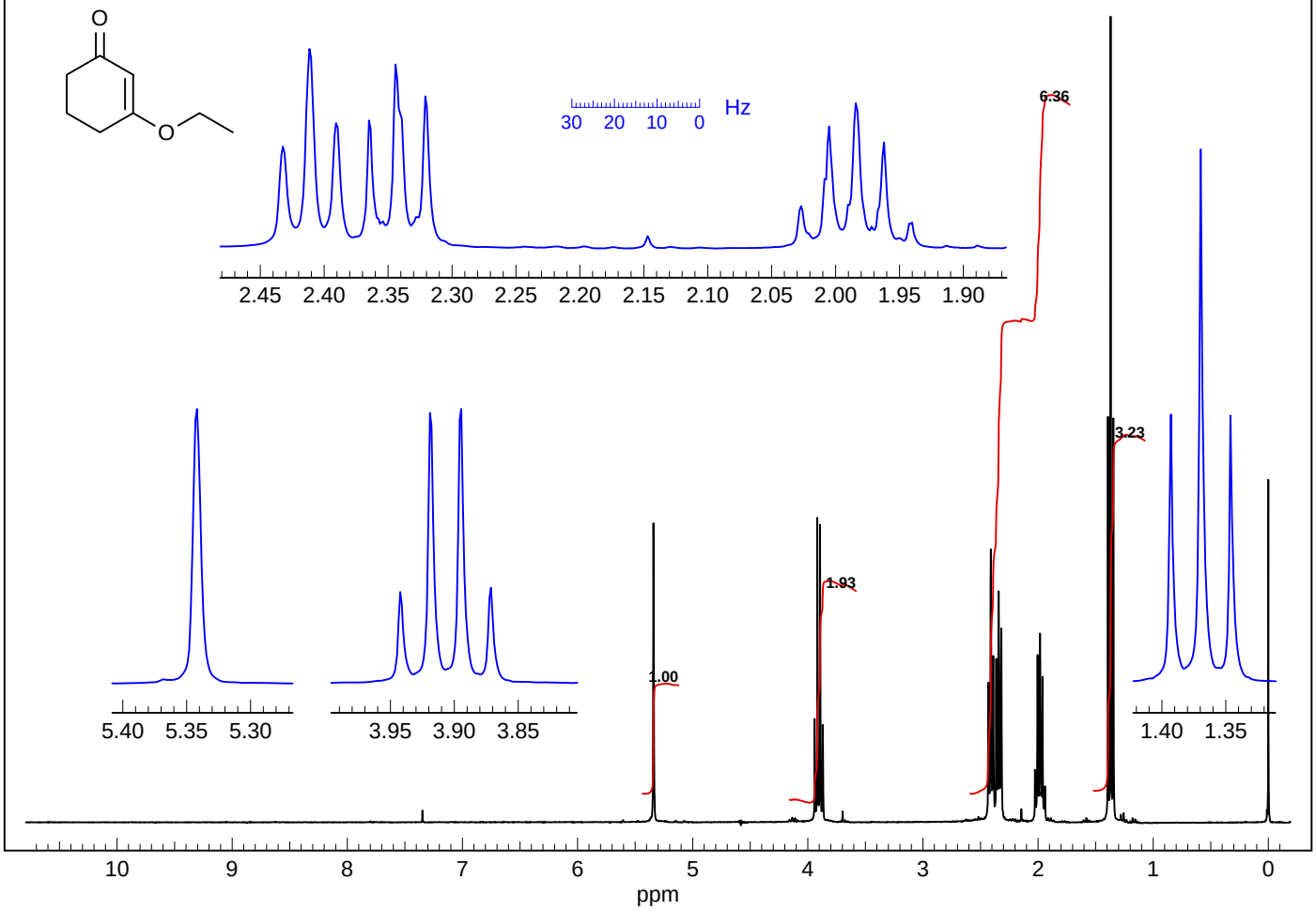
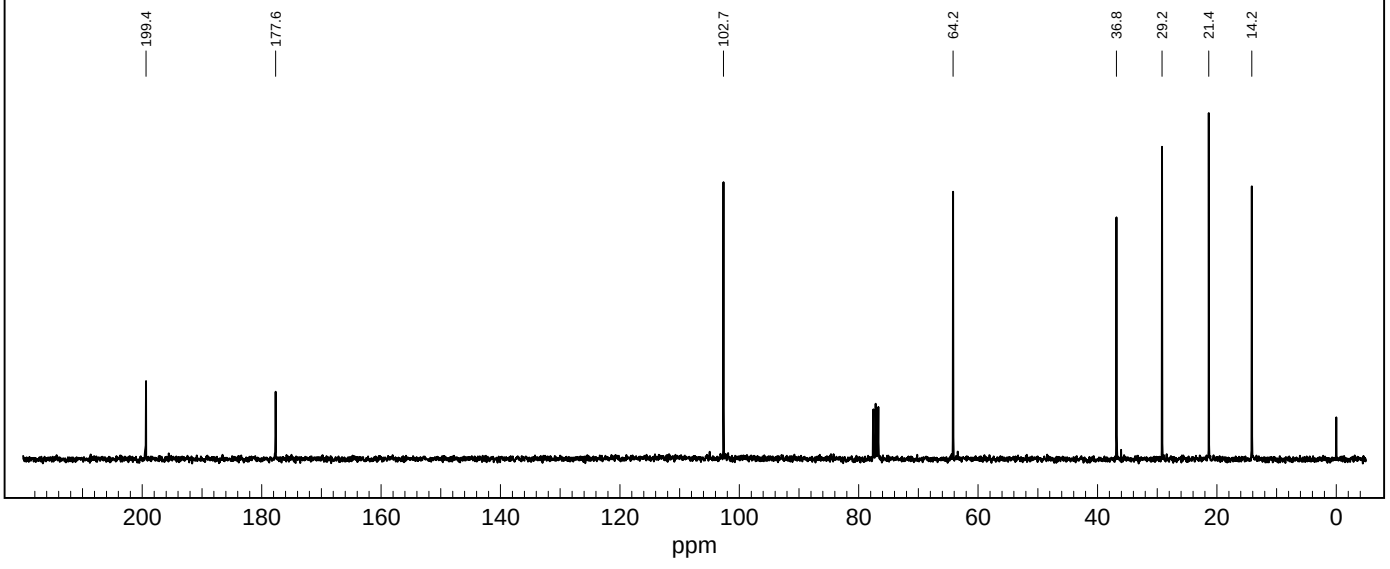
Problem R-17P: $C_8H_{12}O_2$
300 MHz ^1H NMR spectrum in $CDCl_3$
Source: Aldrich Spectral Collection/Reich g

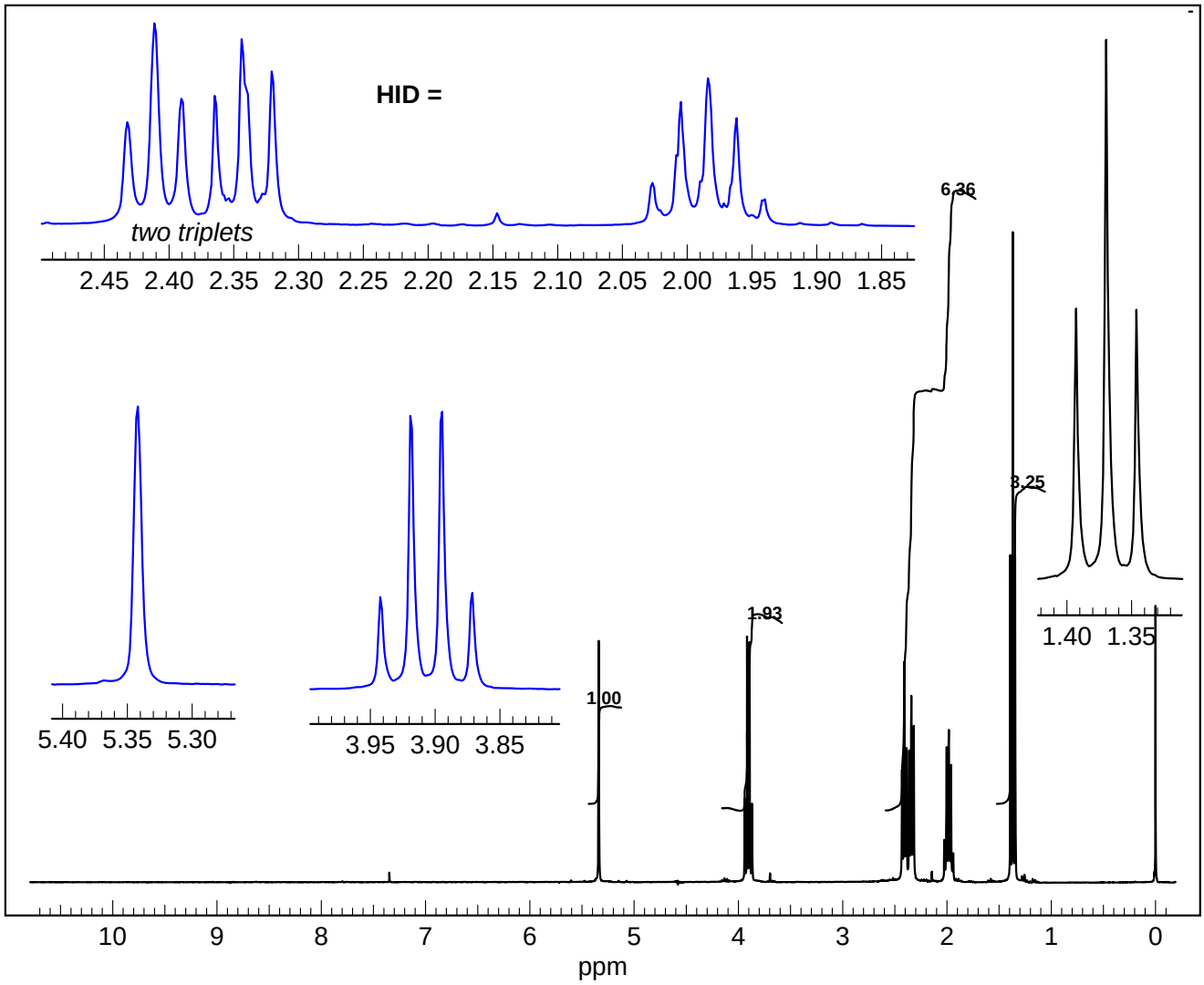


Problem R-17P: $C_8H_{12}O$
75 MHz ^{13}C NMR spectrum in $CDCl_3$
Source: Aldrich Spectral Collection/Reich



PLT pr-017-proton-carbon-x.plt

5. (12 pts.) Determine the structure of $C_8H_{12}O_2$ from the ^1H NMR spectrum shown. Determine the index of hydrogen deficiency. Write part structures revealed by the chemical shifts, splitting and integrals for all the multiplets. In each part structure **circle** the hydrogens responsible for the absorption and **underline** the hydrogens that give rise to the splitting. *Hint: The structure contains a ring.*



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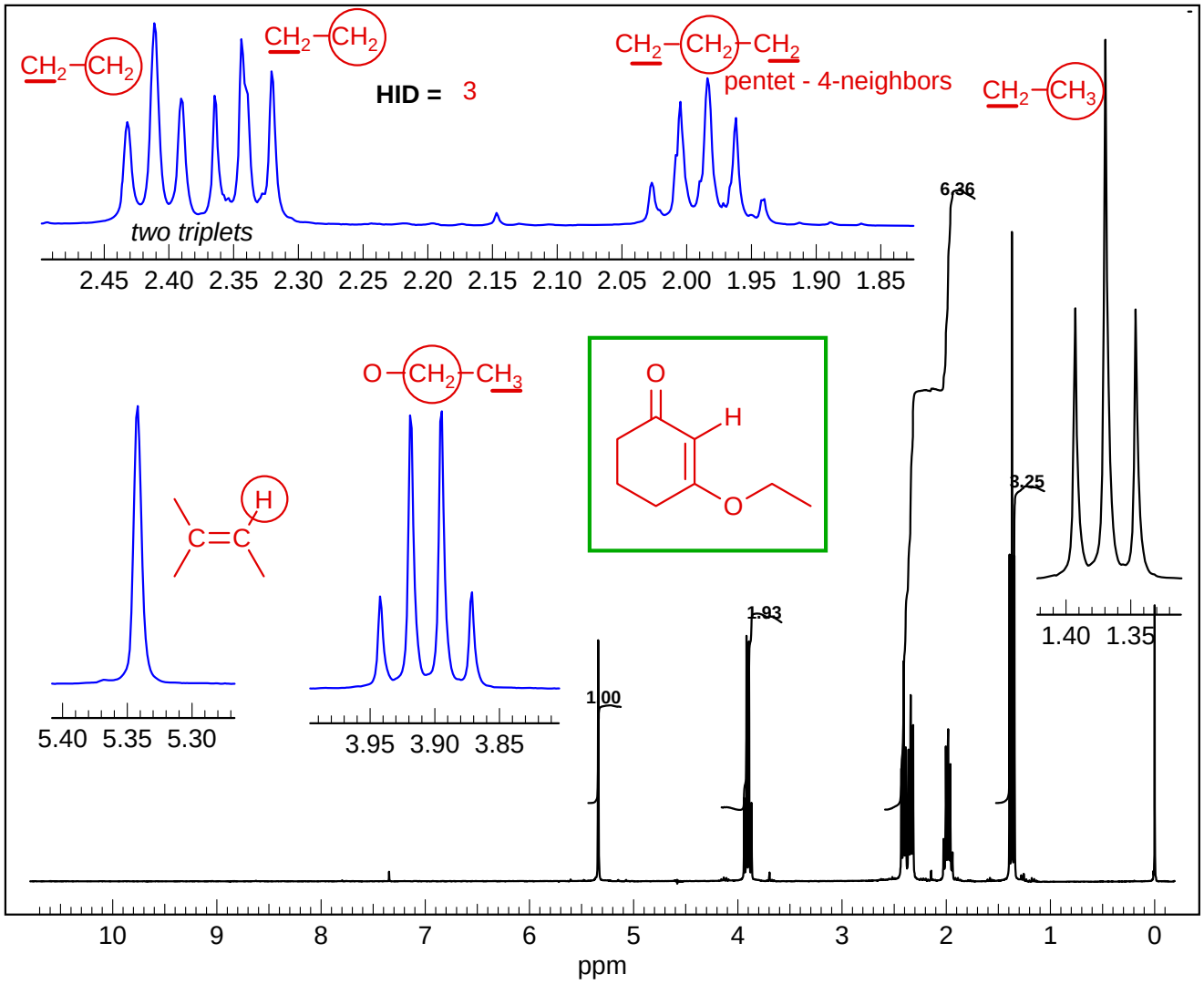

These two also fit the data pretty well