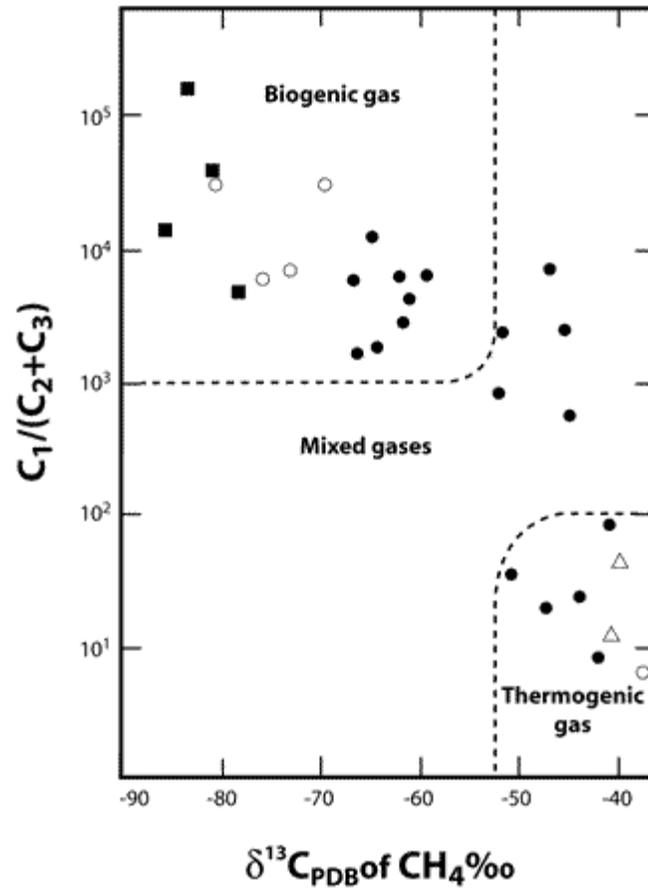


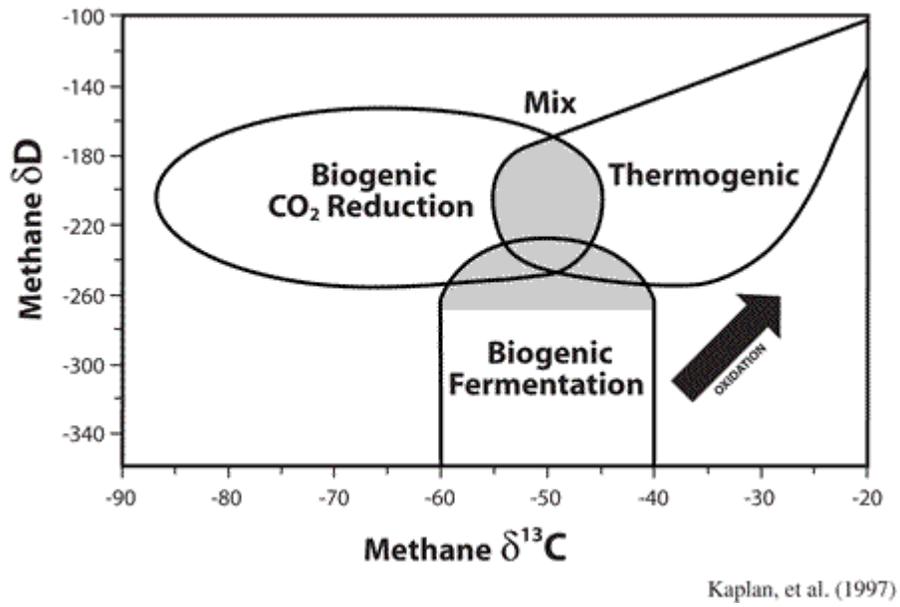
Figure 5-1. Distinguishing Biogenic from Thermogenic Gas by Using Alkane Ratios and  $\delta^{13}\text{C}$



After Bernard (1978)

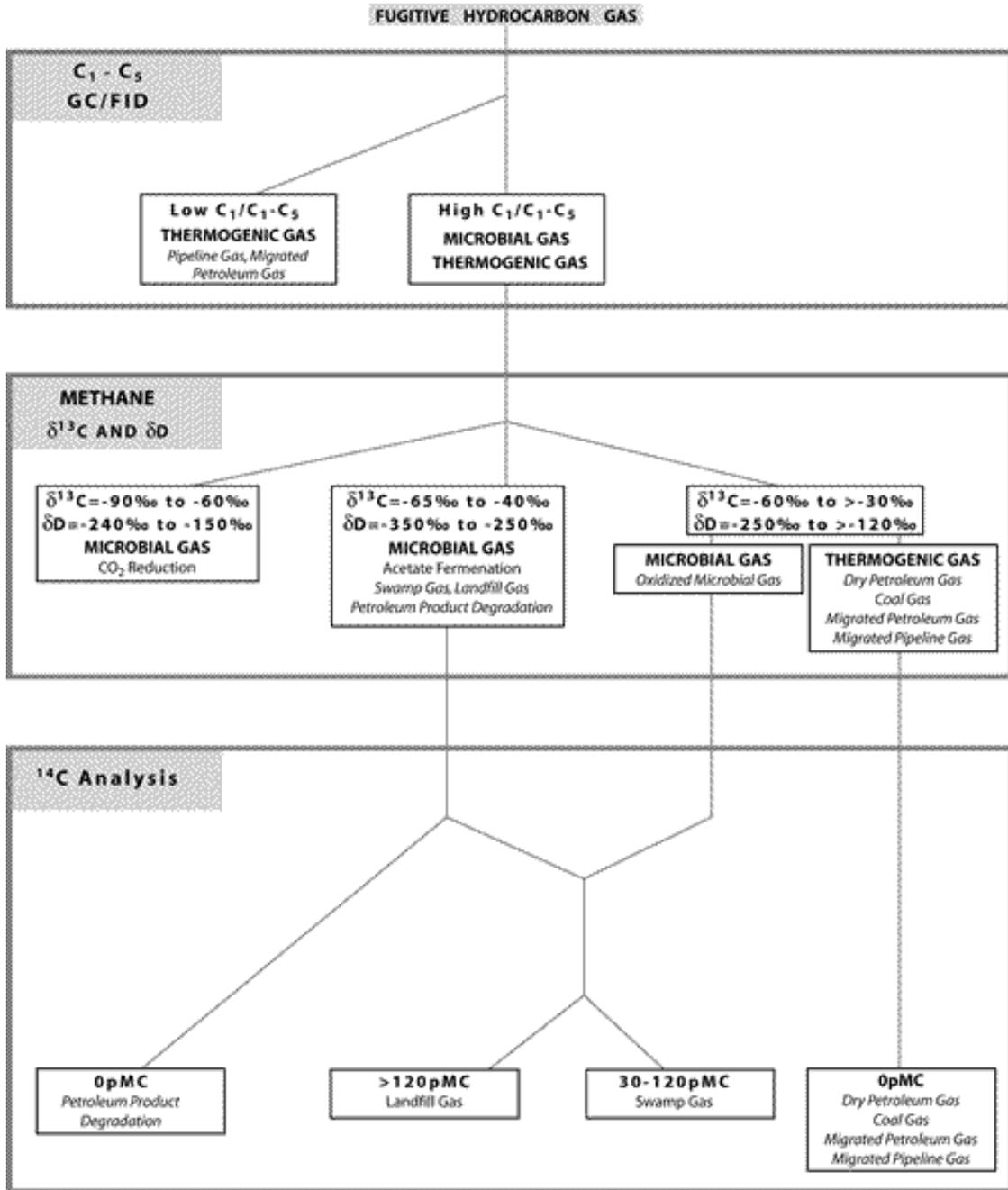
Adapted from Jeffrey et al. (2005), who cited Bernard (1978).

Figure 5-2. Use of C and H isotopes to Distinguish Biogenic from Thermogenic Gases



Adapted from Jeffrey et al. (2005), who cited Kaplan et al. (1997)

Figure 5-3. Identification of the Source of Hydrocarbon Gases



After Jeffrey et al. (2005).

The acronym "pMC" is the percentage of modern carbon as determined by <sup>14</sup>C analysis.