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## Stratigraphic Correlations

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### ABSTRACT

Stratigraphic correlations (graphic correlations) is a methodology introduced in the mid-1960s, as a tool to correlate sections of wells of similar age from either field or regional studies. This tool also allows for a quantitative evaluation of the rate of sedimentation of a section. The basic methodology is to compare the biostratigraphic data of a well against similar data from a known standard of the same age. The first and last appearance of all the species documented in the well are plotted on the y-axis against similar data from the standard on the x-axis. Given the distribution of the fossil data, the interpreter proposes where the line of correlation for the section should be drawn. With the tendencies of the line of correlation, one can estimate rates of sedimentation and document existing hiatuses. However, given the complications of any geologic section, we believe that the use of only 'tops' and 'bottoms' of fossil ranges as the one control for consideration of drawing the line of correlations is too limited. For completeness, we propose the integration of other 'time' events such as sequence boundaries, maximum flooding surfaces, and flooding surfaces, and geochemical, biological, and physical markers as additional controls that will limit where the line of correlation can be drawn and therefore give a measure of greater confidence and control to the position of the final line of correlation.