BIOSTRATIGRAPHY OF THE OJINAGA AND SAN CARLOS FORMATIONS CRETACEOUS OF WEST TEXAS AND NORTHEASTERN CHIHUAHUA

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ABSTRACT

Upper Cretaceous rocks in west Texas and northeastern Chihuahua, Mexico, have been divided into three formations, the Ojinaga Formation, the San Carlos Formation, and the Picacho Formation.

A zonation based on morphologic changes in stratigraphically successive Placenticeras samples is proposed in order to supplement the established Upper Cretaceous collignonicerid zonation. The correlation coefficients of twenty-six stratigraphically unrelated samples are statistically compared with an established Placenticeras evolutionary sequence and time correlations are made at the ninety percent probability level.

The results of the biostratigraphic analysis suggest that the Senonian strandline in Presidio and Jeff Davis Counties, Texas, and northeastern Chihuahua moved in a southeasterly direction during an extensive marine regression.

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