

## **High-Density Well Log Correlation of the Upper Cretaceous Section; Webb, LaSalle, McMullen and Atascosa Counties, Texas**

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Allostratigraphic correlating techniques were used to interpret the Upper Cretaceous interval in over 2,000 digital well logs located in Webb, La Salle, McMullen and Atascosa Counties of Texas. The Upper Cretaceous section is composed of the following formations: Escondido, Olmos, Austin and Eagleford. Allostratigraphy allows for the correlation of surfaces based upon identified well log signatures regardless of formal or named formation units. The correlated surfaces can be characterized according to sequence stratigraphic principles based upon well log curve responses observed for the interval. The resulting geologic interpretation closely corresponds to sequence stratigraphic interpretations of seismic data. Gamma-ray, spontaneous potential and deep resistivity curves were used to create log-response facies for each correlated interval. The log-response facies were then utilized in the creation of a series of maps that give insight into the regional depositional patterns of the study area.