

THE EXPLORATION POTENTIAL OF THE DOWNDIP YEGUA IN SOUTH TEXAS

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ABSTRACT

Historically, South Texas has been known for the Wilcox, Vicksburg and Frio trends which continue to be highly productive. However, there is a 25-mile area between the Wilcox and Vicksburg producing trends, south of the San Marcos Arch, in which few wells have penetrated depths below 7000'. This lightly-explored area could contain an expanded Yegua interval that has not previously been identified. The integration of seismic stratigraphy, high-resolution biostratigraphy, seismic amplitude analysis and well log analysis make it possible to explore for these downdip Yegua opportunities by reinterpreting available well data. Models developed by Vail, Van Wagoner and others, have been used to delineate the shelf margins for the Upper and Lower Yegua intervals, identifying potential reservoirs in expanded proximal lowstand wedge and lowstand fan deposits in south and east of areas currently being explored.

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