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## **Exploration Potential in the Miocene Trend of South Louisiana**

Future Exploration Potential in the Gulf Coast Miocene Trend, Onshore South Louisiana

New discoveries and significant reserve additions to existing onshore South Louisiana fields implies that this prolific Gulf Coast trend has significant remaining potential. The integration of a regional sequence stratigraphic framework with high quality 3D seismic data has resulted in a systematic identification of the opportunities within the Miocene formations. This study confirms great exploration potential in the deep frontier zones as well as in the shallow conventional play in the Gulf Coast basin.

The deep section (below 15,000 feet) is relatively undrilled with several thousand feet of unexploited section underlying the production zone in most areas. The deep-targeted, high-resolution seismic data reveals that intensive salt movement and associated growth faulting in the deep Miocene section have created various structural traps. These structures when associated with accumulations of sand-rich lowstand facies similar to present day slope sediments provide exciting exploration opportunities. The numerous untested deep structural traps offer the greatest remaining potential in South Louisiana. Recent deep discoveries have confirmed that application of new technologies can yield significant production and reserves from these deep targets.

The shallow sections (above 15000 feet), which have been intensely drilled, still contain a significant number of untested subtle stratigraphic traps revealed by new seismic technology. A high percentage of these traps are associated with seismic attribute anomalies. The identification and delineation of these shallow targets is greatly enhanced by the application of 3-D visualization techniques.