Lankahuasa Area: A Promissory Gas Potential Province at the Veracruz Continental Platform

Interpretation of 2d and 3d seismic data on 14,000 sq km offshore Veracruz, between Nautla and Vega de Alatorre cities, show an excellent opportunities to find commercial hydrocarbon accumulations.

At the shelf and deep water Veracruz occur neogene gravity driven extentional-contractional systems with potential syn-depositional plays analogues to the Miocene-Pliocene producing plays at Texas.

The most important plays in Veracruz typically correspond to progradational sequences at shallow water and turbiditic fans at the talus and deep water. Depositional systems dispersed sands and fine sediments on the structures, forming combined traps that were charged through the regional fault systems from different source. Sea floor core studies, demonstrate that thermogenic gas and oil are associate to Jurassic and Tertiary source-rocks.

The high geological risk offshore Veracruz correspond to the quality and distribution of the reservoirs, however the several dispersion fluvio-deltaic systems along the Veracruz shoreline allocate gasiferous sand reservoirs at the Veracruz Basin. This fact indicates a high probability to discover similar reservoirs offshore Veracruz.

A portfolio of 36 exploration prospects has been identified, with several potential gas reservoirs interpreted with seismic anomalies.

The structural neogene Veracruz province has positive geological factors to prospect gas and light oil hydrocarbon accumulations trapped mainly in the progradational plays, analogues to the highs productive plays offshore Texas.