

## Exploring the Mexican Sector of the Deepwater Gulf of Mexico

---

**Guillermo A. Perez-Cruz**, *Coordinacion Tecnica de Exploracion, Pemex Exploracion y Produccion, Villahermosa, Mexico, phone: (993) 3158394, gperezc@pep.pemex.com, Juan Antonio Cuevas Leree, Region Norte, Pemex Exploracion y Produccion, Poza Rica, Veracruz, and Rodolfo Juarez Gomez, Region Marina, Pemex Exploracion y Produccion, Ciudad del Carmen, Campeche.*

---

First attempts to explore de Mexican Sector of the Gulf of Mexico (MSGoM) were made by Pemex in the early 90's. In that time a series of regional seismic sections tied to the shelf were acquired and interpreted by Pemex geologists and geophysicists who were able to map and document numerous potential prospects. The resources associated are quite significant. Leads are distributed along the remote Perdido Fold Belt, the Mexican Ridges and the deepwater extension of the Salina and Campeche basins.

Based upon leads distribution, potential resources, water depths, proximity to production facilities and economic criteria, twelve areas of the MSGoM are considered the most attractive for Pemex to intensify exploration in deepwater. A program to obtain 21,000 sq km and drill 11 exploratory wells in key locations, in the period 2002-2007, is now in place.

Great expectation for reserve substitution relies on the deepwater program. This effort will demand basin evolution, petroleum system and play fairway analysis to support prospect evaluation and drilling.

In this paper, the deepwater strategy, as well as, advances and preliminary results of the acquisition, processing and interpretation activities are addressed. Results of regional framework studies and application of leading edge technologies for proper prospect assessment are also presented. Important challenges for the program are: early finding of large volumes of reserves, quick learning, and feedback of the experiences to advance rapidly.

To accomplish deepwater Pemex's goals, strong collaborative effort among its operational units and service companies is fundamental. Assimilate best practices of deepwater northern Gulf of Mexico is also very important for the reliance of the exploratory program.

---