

Exploration Growth Options in the Deepwater Gulf of Mexico

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The Deepwater Gulf of Mexico, with its proven petroleum system and favourable fiscal regime is considered by many industry players to be one of the world's most attractive exploration targets. The Gulf, once considered a mature exploration province, now has over 65 players in the deepwater, many of whom are recent entrants since the mid-nineties. Rejuvenation has been fuelled by gulf-wide speculative 3D seismic surveys, advances in geophysical imaging and innovative development technologies, pushing the industry into deeper water. Combining these advances has led to recent giant field discoveries such as Crazy Horse and Mad Dog.

While the more traditional direct hydrocarbon indicator play is still being pursued in the Gulf, mean field sizes of this play type have dramatically decreased. Larger opportunities exist in the Mississippi Fanfold Belt and Perdido Foldbelt regions and the deep turtle structures related to the Jurassic Louanne Salt withdrawal. However, these play types typically require technology and cost intensive pre-stack depth migration imaging to move to an acceptable pre-drill risk level.

Availability of land is a major issue to any "new entrant" in the Gulf. Since the 1997 lease sales, acreage has been at a premium with growth trends being held primarily by the majors and large independents that have been exploring in the deepwater for over 20 years. The traditional entry model of exploration lease sale bidding, play maturation and drilling when overlain by technology challenges and intense competition has proven to be a steep learning curve and a formidable barrier to successful entry for several players.

This paper will describe an access strategy pursued by PanCanadian Energy, in an attempt to jump the industry learning curve and build a database to position itself to become a formidable player in one of the most competitive exploration basins in the world.