

## Tahiti Discovery -- Opening Another Deepwater Frontier

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The Tahiti Discovery announced in April of 2002 not only represents a major oil discovery in the Deepwater Gulf of Mexico but opens an exciting new Deepwater Exploration Frontier – ultra deep depth subsalt reservoirs.

The Tahiti Green Canyon 640 #1 well, located in 4,100' of water, targeted the hydrocarbon bearing Lower Miocene section in the emerging Mississippi Fan Fold Belt trend located in Southern Green Canyon. However, the Tahiti prospect was located over 30 miles from the nearest stratigraphic penetration of this interval and it projected into the prospect at significantly deeper structural depth. The trap tested by the discovery well is a three-way anticlinal closure truncated against a salt feeder/weld system buried beneath an 11,000' thick subsalt canopy. This trap type is considered much higher risk than the salt-cored anticlines previously targeted in the fold belt trend, and very difficult to image on conventional seismic data.

The discovery well successfully confirmed the concept, encountering over 400' of net oil pay, primarily in three main Miocene turbidite sheet sands at depths ranging from 24,000' – 27,000'. Reservoirs encountered are of unusually high quality for this depth and subsequent sidetracking of the discovery and appraisal drilling have confirmed significant hydrocarbon columns of high quality crude with excellent reservoir parameters and lateral connectivity.

Future exploratory success for subsalt ultra-deep depth reservoirs will need to mirror the successful integration of pre-stack depth imaging, regional analysis, basin modeling and prospect scale mapping applied at Tahiti. Application of learnings will also be critical as more data becomes available in this exciting but challenging new deepwater frontier.

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