

## Great White and the Perdido Fold Belt -- New Petroleum Province in Ultra Deepwater

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Recent discoveries at Great White and Trident establish the Perdido foldbelt, Gulf of Mexico, as a significant new ultra-deepwater petroleum province in the initial stages of evaluation. Three prospects have been drilled to-date with six additional prospects likely to be drilled by early 2005.

Prospect Baha, a high-relief four-way closure drilled in 2001, encountered residual oil in multiple Oligocene and Paleogene turbidites and established the presence of an active petroleum system. Prospect Trident, the first Perdido discovery drilled in 2002, encountered multiple pay-bearing Paleogene sands trapped in a low-relief four-way closure. Great White, also drilled in 2002 and presently being appraised, encountered oil in three different Oligocene and Paleocene to Eocene turbidite sand packages. Great White is a doubly-plunging, thrust bounded anticline. Reservoirs are interpreted to be basin-floor turbidite sheet and channel sands.

Perdido folds trend northeast-southwest, are segmented along strike by low-relief saddles and appear to have autochthonous salt cores. In a dip direction folds deepen from west to east and are separated by deep synclines. Folds diminish eastward as autochthonous salt becomes thin. Much of the play is covered by tabular, allochthonous salt. Shell identifies three distinct play segments – Eastern Subsalt, Western Subsalt and Outboard (no allochthonous salt). The Perdido area has a high geothermal gradient causing rapid degradation of porosity and permeability with depth, the prediction of which is key in risking and ranking Perdido prospects.

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