



# Weatherford®

## REAL RESULTS

### Weatherford's Drilling with Liner (DwL<sup>SM</sup>) System Enables Spinnaker to Secure Well with Steel FilterCake<sup>TM</sup>

#### Objectives

- Priority: Case off a pressured shale and severely depleted sand lobe, using a 12-ppg water-based mud.
- Qualify the Defyer<sup>TM</sup> DT cutting structure as the only means for getting liner to bottom in the 38° hole.
- Attempt to exceed 6 1/2-in. conventional drilling depth limits.

#### Results

- The 480 ft, 5-1/2 in., 23 lb/ft liner reamed and drilled 113 ft and isolated the problematic zone.
- The DwL system was confirmed to be a sound technology and solution to the problem.
- No mud losses occurred during drilling operations.

#### Value to Client

- DwL technology successfully cased off the severe depletion zone in Spinnaker Exploration's first liner drilling project in the Gulf of Mexico.
- DwL technology enabled a 17-ppge shale and 2-ppge sand interval to be drilled with a 12-ppg mud, placing the liner shoe in a competent shale formation.
- No mud losses occurred during drilling of the 5 1/2-in. casing through the severely depleted zone, and a satisfactory 18.3-ppge FIT was obtained.
- The DwL system enabled the client to put carbon-steel liner across a depleted zone.
- The 3 1/2-in. production tubing was the minimum acceptable string size for completing the well, necessitating a 4 1/2-in. hole to TD after drilling out the 5 1/2-in. liner. To preserve this requirement, the operator considered running an expandable liner, but this option was cost prohibitive, with little chance of success if set in the 2-ppge zone.



Weatherford's drilling-with-liner (DwL) system using 480 ft of 5-1/2 in., 23 lb/ft liner reamed and drilled 113 ft, and isolated the problematic zone.

#### Location

High Island 202 A-2 ST1  
Gulf of Mexico

#### Formation

Depleted sand and shale sequence

#### Water Depth

40 ft (12 m)

#### Run Length

113 ft (34 m)

#### Well Type

Development

#### Products/Services

- DwL technologies
- Defyer DT
- BLTT drill-down running tool (BLRS setting sleeve)
- Gemoco® double-valve float collar