



Weatherford®

REAL RESULTS

Managed Pressure Drilling Reduces Fluid Losses, Enables Drilling of Vietnam's Longest Basement Well

Objectives

- Mitigate brine drilling fluid losses during the drilling of a development well in a pressurized, fractured-basement reservoir where losses and kicks are common. These losses often result in frequent interruptions of the drilling process while waiting for additional supplies of brine-based drilling fluid

Results

- Weatherford designed a constant-bottomhole-pressure (CBHP) system for this well. A model 7100 rotating control device (RCD) was used to control pressure at the surface and enable the well to be drilled with lower-density fluid while minimizing losses and holding surface pressure during connections and trips.
- Brine weight was gradually reduced to compensate for the increased frictional-pressure losses as more of the reservoir was drilled.
- Hole cleaning improved as losses were reduced with a corresponding decrease in torque and drag.
- The well was drilled to 21,411 ft (6,526 m) total depth (TD), including 7,342 ft (2,238 m) of granite-basement reservoir, making it the longest granite-basement well successfully drilled in Vietnam's Cuu Long basin.

Value to Client

- Use of MPD enabled more efficient management of brine consumption, permitting the well to be drilled to target.
- Better hole cleaning resulted in lower torque and drag and faster well clean up with a resulting savings to the operator.



A Weatherford CBHP system was successfully used to minimize drilling fluid losses in this offshore development well in southern Vietnam's Cuu Long basin. CBHP, a variant of managed pressure drilling (MPD), keeps equivalent mud weight and effective bottomhole pressure under precise control at all times by controlling hydraulic backpressure at the surface. The results are a more constant wellbore pressure profile, eliminating kicks when not circulating and preventing losses when circulating.

Location

Cuu Long basin, southern Vietnam

Reservoir

Granite basement

Total Depth

21,411 ft (6,526 m)

Products/Services

- MPD services
- Model 7100 RCD



The model 7100 RCD was rigged up on the blowout preventer.