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REAL RESULTS

TorkDrive™ 500 Modular Tool Allows Client to Run Casing String Faster with Enhanced Safety

Objective

- Run approximately 1,600 ft (488 m) of 18-in., 117-lb/ft casing and approximately 6,400 ft (1,950 m) of 9 5/8-in., 53.5 lb/ft casing on an appraisal well offshore Colombia, South America. Procedures would be developed specifically for this job to minimize rig-up times.

Results

- The well was drilled with no loss of circulation, using the constant bottomhole pressure (CBHP) variant of managed pressure drilling (MPD).
- Weatherford's OverDrive™ top-drive casing running system was used to maximize performance and safety, making it the first use of the *OverDrive* system in South America.
- A *TorkDrive* 500 modular tool was used because of its ability to run large-diameter casing.
- The integral TorkSub™ electronic load cell with the JAM® joint analyzed makeup system ensured all premium connections were made to required specifications.
- The 18-in. casing run was completed in 5 hr (compared to a planned run time of 8 hr), saving 3 hr of rig time.
- The 9-5/8 in. casing run was completed in 13 hr (compared to a planned run time of 18 hr), saving approximately 5 hr of rig time.
- Rig-down of the tool was completed in 45 minutes.



With its enhanced ability to rotate, reciprocate, circulate, and push down casing, the *OverDrive* System can significantly improve joint running time.

Client

Petrobras Colombia Limited

Location

Offshore Colombia, South America

Formations

- Pliocen
- Lower Miocen

Well Type

Exploration

Well Name

Araza-1

Water Depth

1,755 ft (535 m)

Casing

- 18-in., 117-lb/ft Hydril® 511
- 9 5/8-in., 53.5-lb/ft Hydril SLX

Run Length

- 18-in. casing: 1,600 ft (488 m)
- 9 5/8-in. casing: +/-6,400 ft (1,950 m)

Products/Services

- Tubular running services
- *OverDrive* casing running and drilling system
- *TorkDrive* 500 modular tool
- *TorkSub* electronic load cell

Hydril is a registered trademark of Hydril Company.

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Value to Client

- The client achieved significant cost savings because of the improved run times.
- The OverDrive™ system enhanced safety by reducing crew size and risk exposure through the remotely controlled operation of several functions, including integral bails that eliminated the need for a stabber in the derrick. Other safety enhancements included improved weight compensation; tubular makeup; fill-up and circulating; and reciprocating and rotating the casing string.

Sample torque-versus-turn connection makeup graph from the TorkSub™ electronic load cell.

