



Weatherford®

REAL RESULTS

Record-Setting Liner Installation Overcomes Challenging Deviation and Dogleg in Offshore Well

Objectives

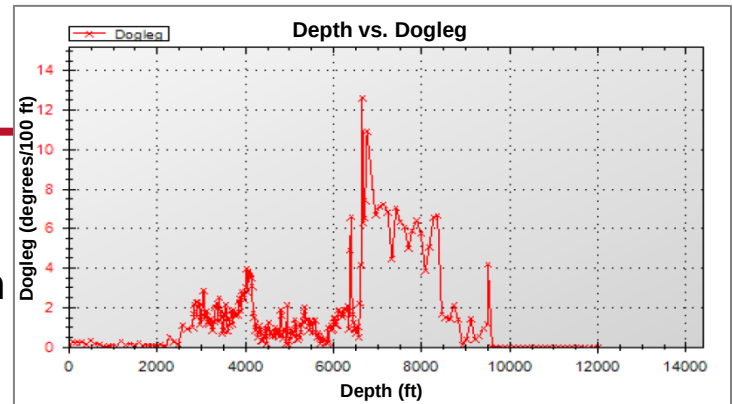
- Run and cement 7-in., 29-lb/ft liner strings to total depth (TD) in two wells without incurring nonproductive time (NPT). Both wells had 9 5/8-in. sidetracks and highly deviated doglegs. Well A had a 75° deviation with a maximum dogleg severity of 9°/100 ft (30.5 m); Well B had a 65° deviation with a maximum dogleg severity of 13°/100 ft (30.5 m).

Results

- Weatherford deployed the premium hydraulic-set, rotating liner hanger (WPHR) in each well, pumped a 1.75-in. (44.5-mm) setting ball for hydraulic setting at the desired depth, and applied additional pressure to shear the ball seat and re-establish circulation.
- The Weatherford service team released the running tool with right-hand rotations and picked up the string for verification.
- The service team ran the liner until reaching TD in both wells at a rate of one joint every 2 minutes. The installation in Well A used 9,035 ft (2,754 m) of liner—the longest in the United Arab Emirates.
- The team ran and installed mechanical cementing products, including 422 8.25-in. centralizers in Well A and 307 centralizers in Well B. The centralizers established concentric casing for an effective, high-quality cementing job.
- After the Weatherford drillpipe dart (DPD) and liner wiper plug (LWP) landed in the Weatherford landing collar (WLCL), they were used to displace cement around the liner.
- The team released the running tools and pulled them out of the hole.
- The entire liner-running and cementing operation incurred zero NPT. The job lasted 72 hours in Well A and 45 hours in Well B.

Value to Client

- Weatherford provided liner-running services and cementing products that enabled the operator to safely install the liners to TD on the first attempt without NPT. The 9,035-ft (2,754-m) liner in Well A marked the longest liner installation in the United Arab Emirates.



Weatherford surmounted challenging deviation and dogleg severities when installing liners in two sidetracked wells. The graph above shows the variation in the dogleg, which reached a maximum severity of 13°/100 ft (30.5 m) in Well B.

Location

United Arab Emirates

Well Type

Offshore

Well Measured Depth

- Well A: 14,783 ft (4,506 m)
- Well B: 14,138 ft (4,309 m)

Parent Casing Size

Well A and B: 9 5/8-in. 47.0 lb/ft L-80 VAM® TOP

Liner Size

- Well A: 7-in., 29.0-lb/ft L-80 VAM TOP HT-NA
- Well B: 7-in., 29.0-lb/ft L-80 VAM TOP HT

Top of Liner

- Well A: 5,748 ft (1,752 m)
- Well B: 7,576 ft (2,309 m)

Liner Length

- Well A: 9,035 ft (2,754 m)
- Well B: 6,562 ft (2,000 m)

Products/Services

- Polished bore receptacle
- WPHR liner hanger
- LSSR liner setting sleeve
- DPD drillpipe dart
- LWP liner wiper plug
- WLCL landing collar
- TDH top-drive cement head

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Weatherford
Mohamed El Khatib
WCP Business Unit Manager of UAE
Mohamed.elkhatib@me.weatherford.com

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