DRILLING SERVICES REAL RESULTS

RipTide® RFID Drilling Reamer Enlarges by 44% To Drill Out 568 ft (173 m) of Cement in 8 Hours



The RipTide RFID drilling reamer passed through a 9.533-in. (242-mm) restriction before expanding from 8.5 to 12.25 in. to drill through a cement plug in an offshore well.

Objectives

 Drill out cement plugs inside 14- and 10-in. casing to create a completion-ready through-bore. The operator required a bottomhole assembly (BHA) capable of not only passing through the smaller drift of the dummy hanger at the wellhead, but also reaming cement out of the larger outside-diameter casing.

Our Approach

- Weatherford proposed the 8500XL RipTide drilling reamer, which is activated using radio-frequency identification (RFID) technology and delivers a high-quality, completion-ready bore.
- The Weatherford team performed a detailed risk assessment, placed the RipTide RFID reamer near the bit, and deployed it through the restrictive 9.533-in. (242-mm) drift of the dummy hanger.
- Once the bit tagged the top of cement, the team picked up the BHA, programmed the RFID tags, and dropped them into the cleanout string to activate (expand) the reamer. Then, the team drilled and reamed out the 568-ft (173-m) cement plug inside the 14-in. casing in 8 hours. After that, the team circulated the hole clean, used RFID tags to deactivate the reamer, and pulled out of the hole.
- The team ran a rotary BHA and 8.5-in. bit farther downhole to drill out the bottom plug inside the 10-in. casing.

Value to Customer

 The RipTide reamer performed beyond the capabilities of conventional 8500 underreamer sizes by expanding from 8.5 to 12.25 in, or by 44%. This expansion enabled reaming out the top cement plug, which helped to recover full-bore access to the well for subsequent completion and production operations.

LOCATION

Egypt

WELL TYPE

Offshore, oil, deviated, development

HOLE SIZE

 8.5×12.25 in.

CASING SIZE

14 and 10 in.

DEPTH

- In: 4,878 ft (1,487 m)
- Out: 1,660 ft (1,660 m)

PRODUCTS/SERVICES

RipTide RFID drilling reamer

