

Low-Pressure Casing-Exit Packer Provides Economical Solution For Liner-Cementing Operation

Objectives

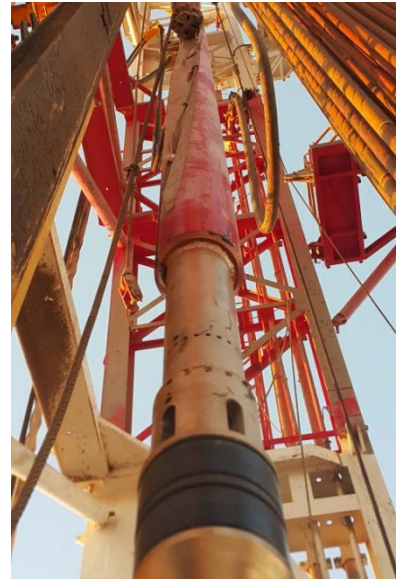
- Establish a barrier that prevents cement from entering the main bore when cementing a 7-in. liner across the casing-exit window.
- Verify isolation of the main bore for milling, drilling, and cementing operations by performing a pressure test.

Our Approach

- Weatherford deployed the QuickCut™ casing-exit system with the MultiCatch™ anchor and a permanent low-pressure casing-exit packer.
- The Weatherford team hydraulically set the MultiCatch anchor, and then simple downward force activated the low-pressure packer. A wellbore pressure test verified isolation of the main bore at 6,124 ft (1,867 m) with the packer holding 750 psi (5.2 MPa) of pressure for 10 minutes.
- Using the QuickCut milling assembly, the team milled the casing-exit window and formation in an 11-hr single run. Inspection of the mill at the surface showed a 1/16-in. (1.6-mm) loss, which met the operational requirements.
- The team drilled the lateral to the target depth and installed the 7-in. centralized liner through the casing-exit window.
- The success of the milling and drilling operations enabled the operator to cement the liner as planned with an effective barrier in place.

Value to Client

- Using the low-pressure casing-exit packer enabled the operator to establish a barrier that prevented cement from intruding into the main-bore casing below the whipstock assembly.
- The low-pressure packer barrier reduced costs compared to traditional isolation methods used in sidetracking operations.



The Weatherford low-pressure casing-exit packer runs as an integral part of the whipstock assembly and therefore requires no additional trips to install.

LOCATION
Kuwait

WELL TYPE
Onshore, production

FORMATION
Limestone

HOLE ANGLE
1°

MILL SIZE
8.5 in.

MILLING FLUID
Oil-based mud

CASING TYPE AND SIZE
9.625 in., 43.5-lb/ft L-80

DEPTH

- In: 6,111 ft (1,863 m)
- Out: 6,132 ft (1,869 m)

SETTING DEPTH
6,134 ft (1,870 m)

RUN LENGTH
21 ft (6.4 m)

PRODUCTS/SERVICES

- Low-pressure permanent casing-exit packer
- QuickCut casing-exit system
- Hydraulic MultiCatch anchor

