



Weatherford®

REAL RESULTS

Weatherford Collaborative Liner System and Cementing Product Services Enable Operator to Drill Production Zone

Objectives

- Efficiently reach total depth and cement the liner.
- Form a reliable seal between the liner OD and the host-casing ID.

Results

- The 8 1/2-in. open hole was reamed in preparation for installing a 7 5/8-in liner. The liner was run to a total depth of 11,299 ft (3444 m) and rotated at 10 rpm with good mud returns.
- The Mk5 SWP plug with integral ball seat was used to maintain fluid separation and provide a pressure-tight chamber to hydraulically set the liner hanger at a depth of 6,850 ft (2087 m). The running tools were released prior to cementing operations.
- Liner rotation continued at 10 rpm before and during the cement job.
- The running-tool packer actuator was lowered above the Weatherford SwageSet polished bore receptacle (WPBR) to mechanically set the SwageSet packer and provide a pressure-tight liner string.
- The packer was pressure-tested to 5,000 psi.

Value to Client

- The WPBR, SwageSet packer, and Weatherford premium hydraulic-set rotating (WPHR) liner hanger were run to TD without incurring nonproductive time.
- The bow-spring centralizer subs enhanced cementing operations by providing excellent standoff in the open hole.
- Proper zonal isolation was established from the liner-top to the shoe, which enabled the client to drill and complete the deep well without losses.
- The SwageSet packer was run, installed, and pressure-tested with no environmental or safety incidents.
- The ISO 14310/API 11D1-qualified SwageSet packer ensures a high-integrity, reliable seal for the life of the well.



Weatherford provided an integrated system comprised of a compatible liner system and cementing products that successfully established liner-top isolation and enabled the production zone to be drilled and completed in a deep, onshore oil and gas exploration well in Iraq.

Location

Erbil, Iraq

Well Type

Oil and gas exploration

Casing Type and Size

9 7/8-in., 62.8 lb/ft, T-95 Hydril SLX

Liner Type and Size

7 5/8-in., 55.3 lb/ft, C-110 TSH MAC-11

Products/Services

- SwageSet WPBR
- SwageSet liner-top packer
- WPHR liner hanger
- WLCS landing collar
- Bow-spring centralizer subs
- M45AN autofill float collar
- DiamondBack reamer shoe
- Mk5 SWP wiper plug
- Drill pipe dart

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