MetalSkin® Openhole Liner Isolates Challenging Formation Interval, Saves 3 to 4 Days of Rig Time

Objectives

- Re-enter a well to enable drilling the well to the desired depth and completing it with 4 1/2-in. liner.
- Create a mechanical isolation barrier between the top shale formation and the bottom loss-prone formation, which require different drilling parameters and mud weights to avoid losses in the anticipated production zone.

Our Approach

- Weatherford proposed the MetalSkin openhole liner as a reliable solution to extend the 7-in. casing through the shale formation and 16 ft (5 m) into the bottom reservoir zone.
- Approximately 400 ft (122 m) of 5 1/2- × 7-in. MetalSkin liner was deployed and run to the target depth at 11,214 ft (3,418 m).
- The liner was cemented in place and expanded hydraulically with a 148-ft (45-m) overlap with the 7-in. host casing. The post-expansion ID helped to minimize the telescoping of the well and adhere to the original well plan.
- The finished liner installation isolated the loss-prone formation and enabled the client to conventionally complete the well.

Value to Client

- The MetalSkin openhole liner covered the problematic interval to provide a permanent mechanical barrier between two formations with different drilling characteristics.
- The liner enabled the operator to drill using a lighter-weight mud than originally planned and saved 3 to 4 days of rig time by avoiding the loss of drilling fluids.

The Weatherford MetalSkin openhole liner can be used in the early stages of the well life cycle to preserve completion size in challenging drilling applications.

LOCATION
Algeria

WELL TYPE
Onshore, re-entry, oil and gas

OPENHOLE SIZE
7- × 6-in. underreamed

SURFACE CASING SIZE
7 in., 32 lb/ft @ 11,004 ft (3,354 m) MD

DEPTH
11,214 ft (3,418 m) at 6.1° inclination

PRODUCTS/SERVICES
5 1/2- × 7-in. MetalSkin openhole liner

* MetalSkin is a registered trademark of Weatherford in the US and the United Kingdom.

Weatherford®