

# Weatherford Premium Hydraulic-Rotating Liner Hanger System Reaches TD in Weak Formation with Zero Losses and Saves 7 Hours of Rig Time

## Objectives

- Run and cement a 6,725-ft (2,050-m) liner to a 14,806-ft (4,513-m) total depth (TD) in a weak formation.
- Provide clear indications of the plug setting pressures to enable fluids and cement pumping without fluid losses or formation damage.

## Our Approach

- The Weatherford team proposed running and cementing the 6,725-ft (2,050-m) liner using the Weatherford premium hydraulic-rotating (WPHR) liner hanger, a Weatherford polished-bore receptacle (WPBR), and a single-wiper plug (SWP).
- The team ran the liner system in the openhole section and circulated at TD.
- During cementing operations, the SWP enabled the ball seat to shear closer to the liner top, rather than at the landing collar, to reduce pressure on the weak formation. The team observed a clear indication of shearing at the surface.
- The team rotated the liner hanger to enhance cement coverage around the liner.
- The team then set the liner-top packer and drilled out the plugs.
- Logging data confirmed successful zonal isolation, and a pressure test confirmed successful setting of the packer for reliable isolation of the target zone with no fluid loss.

## Value to Client

- Using the Weatherford 7-in. premium WPHR liner hanger enabled the operator to reach TD and achieve complete isolation with no damage to the formation in 53 hours. The operation saved 7 hours of rig time as compared to similar operations performed without using the premium system.
- The SWP provided shearing without affecting the formation. The clear indication of plug setting enabled the operator to confidently proceed with the installation and plan the pumping sequences.



The Weatherford premium liner hanger (left) and SWP (right) isolated a challenging formation.

### LOCATION

Turkmenistan

### WELL TYPE

Onshore, production

### HOLE SIZE AND ANGLE

8.5 in., 17°

### CASING SIZE AND TYPE

7-in., 32-lb/ft VAsuperior® N-80Q

### LINER LENGTH

6,725 ft (2,050 m)

### DEPTH AND MAXIMUM DEVIATION

14,806 ft (4,513 m) TVD, 17°

### BOTTOMHOLE PRESSURE

9,839 psi (67.84 MPa)

### PRODUCTS/SERVICES

- 7-in. WPHR
- WTSP5R3
- WPBR
- Jointed SWP system

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