REAL RESULTS

RipTide® RFID Drilling Reamer Enlarges Wellbore, Saves 2 Days of Rig Time Valued at $220,000

Objectives

• Drill and ream a 1,949-ft (594-m) section to prepare for running 9 5/8-in. casing to total depth (TD) in a well with a lithology including sand, siltstone, claystone, and limestone.

Results

• Weatherford deployed the model 12000 RipTide radio-frequency identification (RFID) drilling reamer on a rotary-steerable system in the bottomhole assembly (BHA), which also included measurement-, logging-, and pressure-while-drilling technology.

• For the first time in Latin America, Weatherford operated the RipTide driller reamer using RFID technology. Drilling and reaming started at a depth of 6,976 ft (2,126 m). The reamer performed continuously and averaged a 40.5-ft/hr (12.3-m/hr) rate of penetration at an inclination angle between 51.16° and 81.94°.

• The RFID reamer enlarged the hole section from 12-1/4 to 13-1/2 in. and reached a TD of 8,925 ft (2,720 m) in two trips. The reamer did not require changing or reconditioning to complete the operation.

• RFID technology provided multiple activations for various tasks: performing surface testing, initiating hole enlargement, continuously drilling and enlarging until reaching TD, and enlarging the pilot hole. The operator ran the 9 5/8-in. casing to TD.

Value to Client

• The RipTide RFID drilling reamer enabled the operator to drill and ream the hole section to TD. Reaming prepared the well for casing running without a reconditioning trip, which saved 2 days of rig time valued at approximately US $220,000. RFID technology provided multiple on-demand activations of the reamer when needed.