

Thin-Wall Motor Drills Challenging Interval in Single Run While Setting ROP Record, Middle East

DynaForce DTX motor achieves new drilling performance standard

A major operator in the Middle East sets a new field ROP record using a DynaForce DTX* thin-wall motor, drilling 5,260 ft at 83.5 ft/h in a single run through abrasive and high-compressive-strength formation, enduring temperatures of 212 degF and beyond.

Drill section at ROP in one run through challenging interval

An operator in the Middle East wanted to improve ROP while drilling 12-in vertical sections in one run for a particular field. These sections fall within a 6,000- to 7,000-ft interval, consisting of multiple formations with varying compressive strength and abrasiveness. Previous motor configurations suffered inconsistent performance results, achieving either high ROP with two runs or low ROP with one run—never both. The operator wanted both.

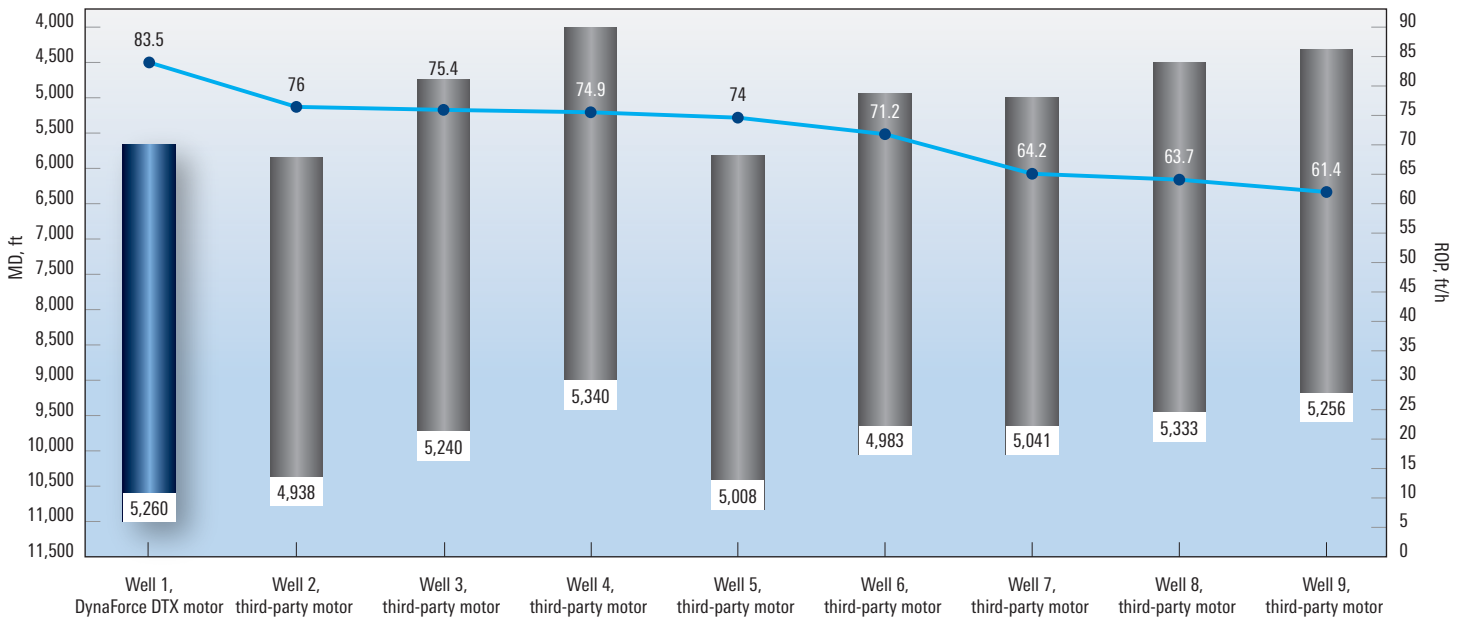
Optimize drilling performance with higher operational temperature endurance and torque

Schlumberger proposed using a DynaForce DTX motor due to its high torque output and an ability to endure high differential pressure while drilling the high compressive strengths and temperatures above 212 degF. The DynaForce DTX motor improves drilling performance in harsh drilling environments. And the thin-wall power section offers increased power output to maximize ROP, reduce motor-stall risk, and improve steering accuracy.

Set new performance field performance record

The BHA using the DynaForce DTX thin-wall motor set a new field ROP record for drilling the 12-in section—83.5 ft/h. This ROP is 17.7% faster than the average of the field’s top nine ROP runs and more than 36% faster than the field ROP average.

Performance Comparison, 12-in Section



The BHA using a DynaForce DTX motor set a new field ROP record, drilling the 12-in section 17.7% faster than the average of the top nine ROP runs.

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