

WWT NRPs Reduce Torque 34% with in a Long Horizontal Well

High Torque with WBM

A T&D analysis was performed at the request of an operator for solutions to mitigate high torque in the 8-1/2" section drilled with water based mud.

WWT NRP Recommendation

WWT's service engineer commenced installing SS3-550 NRPs at a bit depth of 11,900ft MD. At TD, a total of 185 NRPs were installed at a frequency of 1 per joint, 3 per stand, from surface to 6,000ft MD as shown in the highlighted orange area in the vertical section plot.

Estimated 34% Torque Reduction

Prior to installing NRPs, the torque trend exceeded friction factors of 0.40 at the start of the 8-1/2" section. As drilling continued, torque steadily decreased as more NRPs entered the wellbore. At TD, the torque trend was below simulated friction factors of 0.25.

Comparing the trend prior to installing NRPs, to the actual torque at TD, suggests a 34% torque reduction with NRPs installed.



Location: Middle East
Well Type: Horizontal
Objective: Torque Reduction
Solution: WWT SS3-550 NRPs
Results: 34% Torque Reduction

