

# Reduced Torque while using WWT NRPs to drill Sidetrack

## Sidetracking High Profile Well

While drilling an S-shaped well, high torque was encountered and afterwards the BHA got stuck causing the operator to sidetrack the well.

WWT NRPs were called out to reduce drilling torque while drilling the 16" sidetrack section. The adjacent figure shows a comparison between actual torque encountered while drilling the main-bore without NRPs, and actual torque during the sidetrack with NRPs.

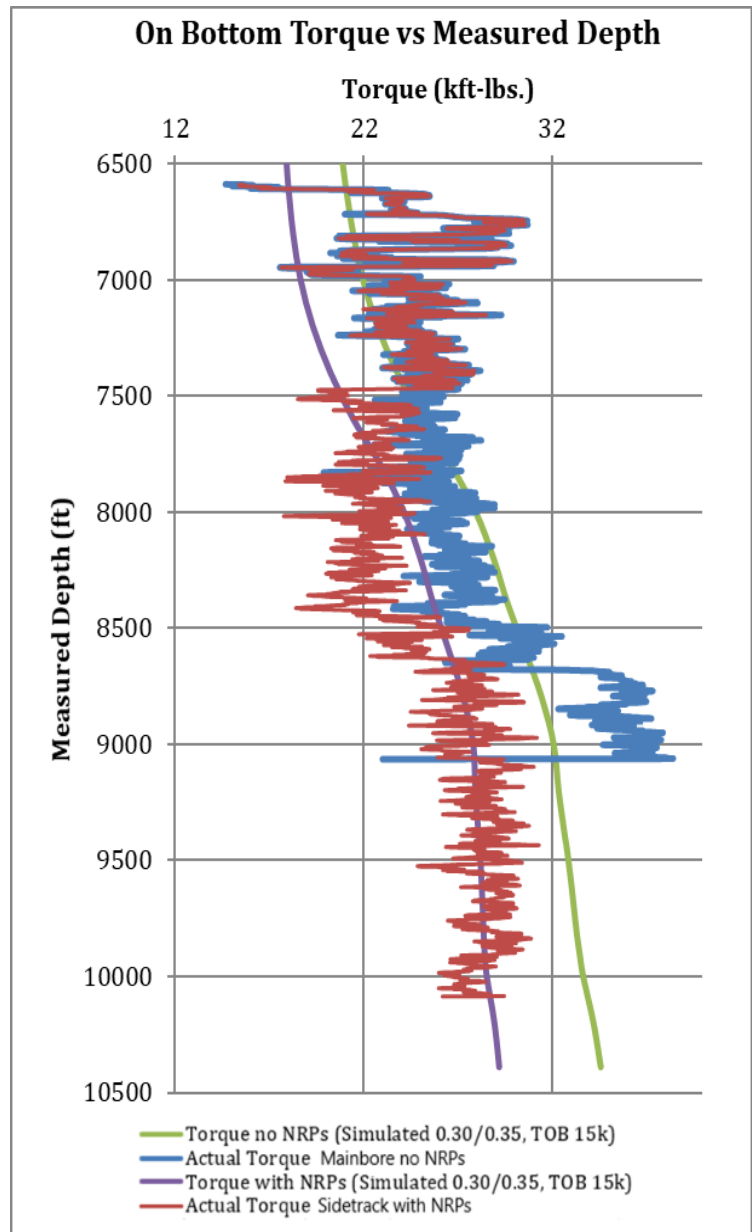
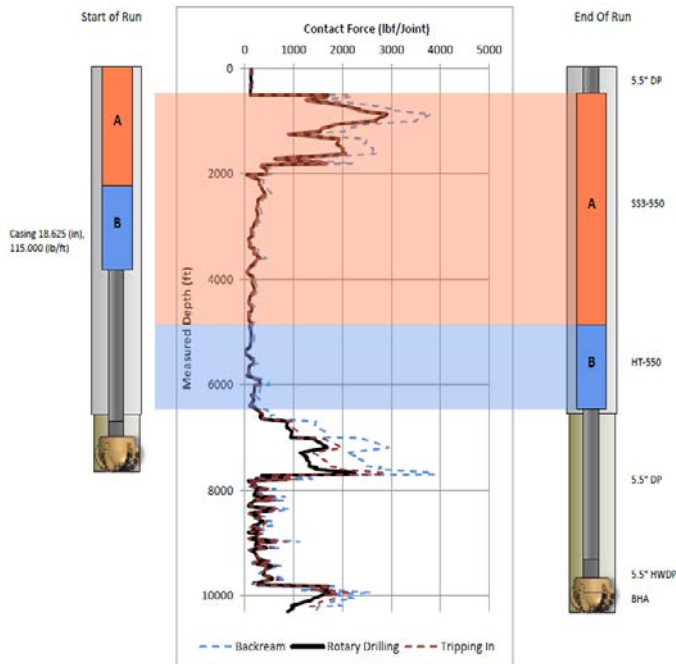
## WWT NRPs Installed: Torque Decreased by 16%

141 x SS3-550 and 51 x HT-550 were installed to cover the entire casing as shown below.

As NRPs started entering the hole, it was noticeable that the torque trend decreased compared to actual readings while drilling the main-bore. A comparison with simulated values also showed the effect NRPs had on reducing friction and stabilizing the torque around 28.3kft-lbs. instead of the expected 33.6kft-lbs.



**Location: Middle East**  
**Well Type: S-Shaped**  
**Objective: Torque Reduction**  
**Solution: SS3-550 & HT-550**  
**Benefit Seen: 16% Torque Reduction.**



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