

26% Torque Reduction in a Sidetrack after Using WWT NRPs

High Torque Encountered

An operator using small rigs to drill shallow vertical wells had to drill a build-and-hold well where high torque was encountered while drilling the 12-1/4" section. After having to sidetrack the well, the operator decided to use WWT NRPs to keep the torque below the rig limit in this challenging well profile.

WWT Torque and Drag Analysis

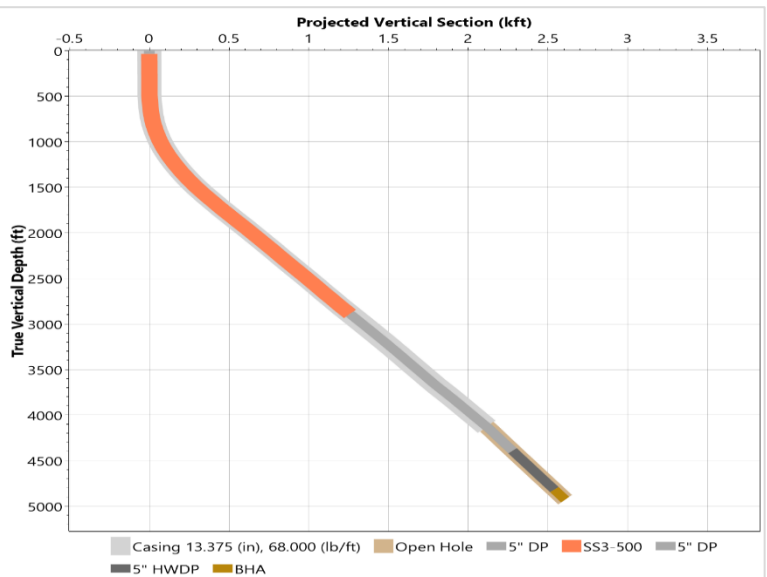
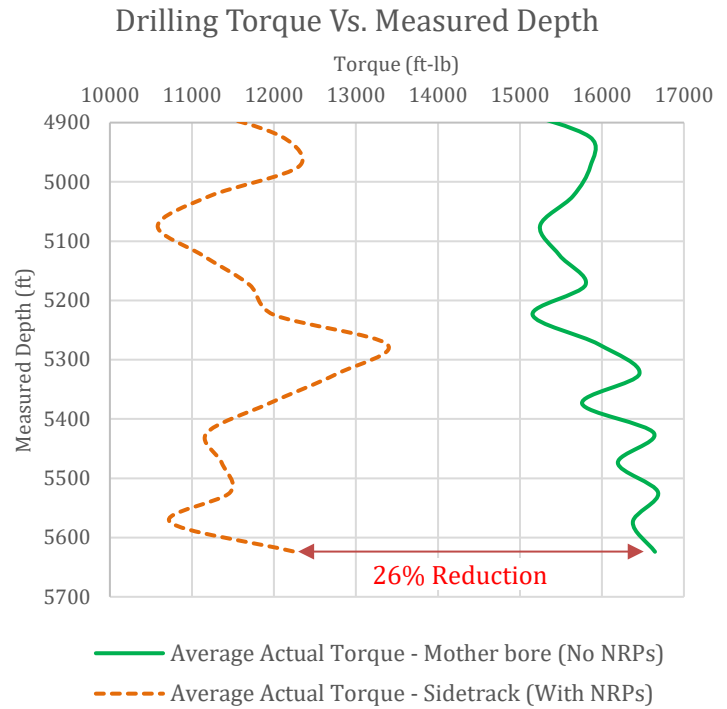
WWT performed torque and drag analysis to identify the major area where torque is generated. The technical recommendation by WWT was to install the NRPs across the build and part of the hold sections where high side force was analyzed. At TD, a total of 96 NRPs were installed to cover from 195ft to 3,212ft (MD). NRP placement is highlighted in orange as shown on the vertical section projection graph.

An Average of 26% Torque Reduction

At the start of the sidetrack where NRPs were used, 25% torque reduction was observed compared to the torque seen in the mother bore where no NRPs were used. The torque in the sidetrack continued to be much lower than the mother bore. At TD, 26% torque reduction was observed. The operator was pleased with the results and continued to use NRPs in the same field for similar challenging well profiles.



Location: Middle East
Well Type: Build and Hold
Objective: Torque Reduction
Solution: SS3-500
Benefit Seen: 26% Reduction



WWT Non-Rotating Protectors
www.wwtinternational.com