



WWT Non-Rotating Protectors Provide 24% Torque Reduction

NRP Performance:

- 99 SS3-500 NRPs used for torque and drag reduction under maximum contact loads of approximately 4,900 lbf per joint.
- A backmodel analysis suggests torque was reduced by approximately 25%.
- NRPs reduced torque by 24% compared to an offset well.

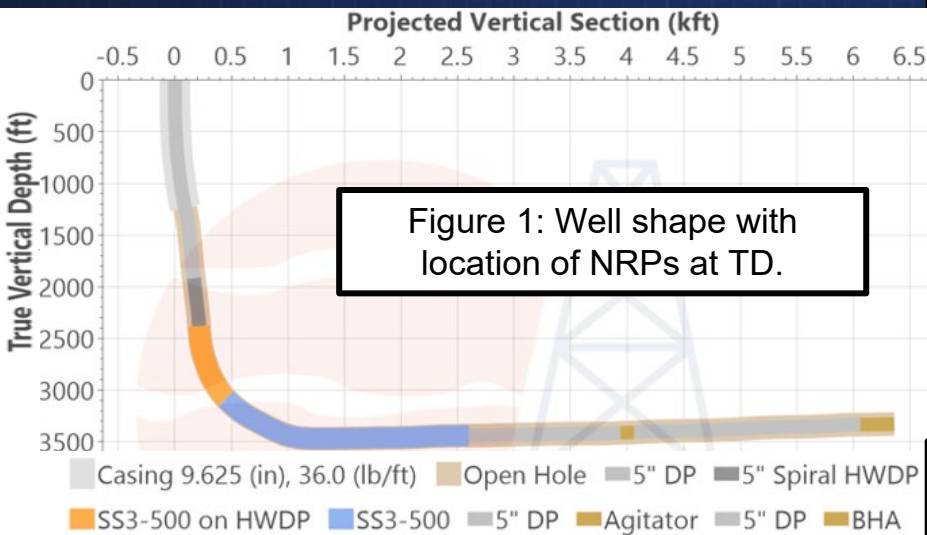


Figure 1: Well shape with location of NRPs at TD.

Figure 2 (above): Showing NRPs in good condition racked back after drilling.

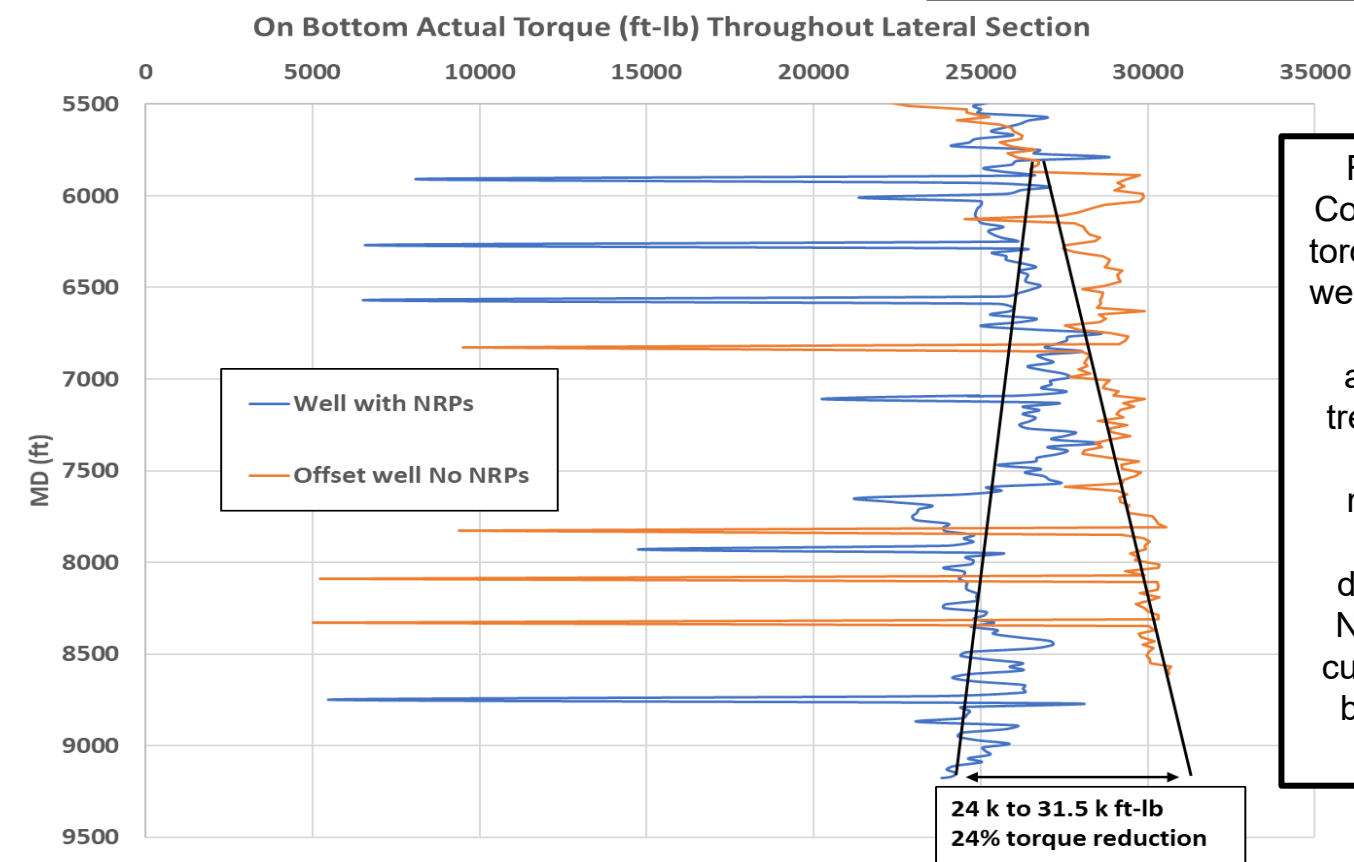


Figure 3 (left): Comparing drilling torque to the offset well without NRPs. A continued average linear trend indicates a 24% torque reduction with WWT NRPs; diverging when NRPs enter the curve where they begin reducing torque.