

Drilling extended-reach laterals in harsh downhole environments presents numerous technical challenges, particularly when torque, drag, and drill pipe wear become critical concerns.

#### Client challenge:

A customer contacted us in the middle of the night with an urgent issue: their top drive system had reached its maximum torque capacity. An immediate solution was necessary to prevent delays and continue drilling to total depth (TD).

#### Our solution:

To mitigate the torque issue, WWT Non-Rotating Protectors (NRPs) were deployed to the rig site and installed. The customer was immediately able to continue drilling and maintain optimal parameters for the remainder of drilling the production section.

#### Results:

Actual torque data was used to back-model the well. This analysis revealed that without intervention; torque levels would have reached 42,000 foot-pounds. Shown in the graph, drilling torque was reduced by 7,000 ft-lb or (14%). NRPs remained on the drill pipe for subsequent wells on the pad after achieving these results.

