



WWT Non-Rotating Protectors

WWT Non-Rotating Protector Provides
Greater Than 25% Torque Reduction

Complete Riser Protection without POOH on a Series of Offshore Wells

Location: Africa

Well Type: Directional

Objective: Riser protection without POOH

Solution: WWT NRPs in open hole

Results: Riser protected throughout each well
in one bit run to TD

Multiple section wells requiring riser protection

Several wells were drilled from a tender assisted rig over a tension-leg platform with riser protection needed while drilling 16", 13-1/2", 9-1/2", and 6-1/2" sections. The risers were 800-900m deep, the casings were only 1500m deep, and the bit runs were 2500m long.

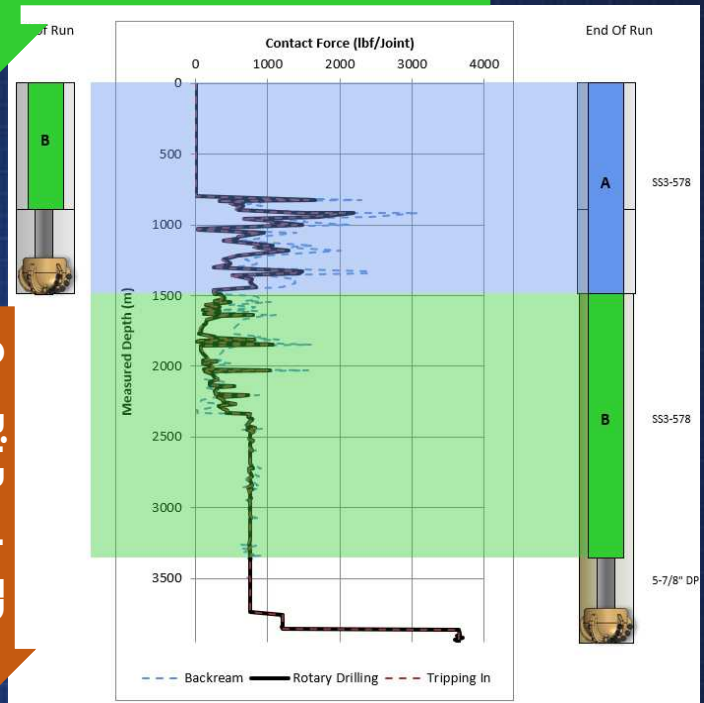
WWT SS3-578 into open hole

Non-rotating protectors (NRPs) were installed to cover the 800-900m risers from the start of each run. They reached depths of 2500-3000m MD on several sections with casing shoes at 1400-1500m, thus going into open hole. Around 200-360 assemblies were installed on the different sections of which 100-200 assemblies went into open hole on several 16" and 13-1/2" sections. WWT SS3's ability to go in open hole was able to achieve full riser protection throughout all runs without having to pull out to change positioning of protectors.

Several sections and several wells drilled with WWT SS3

A series of wells (10 and counting) was drilled with protectors going into open hole on 16" and some 13-1/2" sections, and only in cased hole on some 13-1/2", 9-1/2", and 6-1/2" sections. Protectors were inspected on each trip and replaced when necessary. This proves the durability, the effectiveness, and easy handling of WWT NRPs.

Riser Protected @ Start of Run



One Bit Run to TD

Protectors in open hole at TD

