

GOM Operator Preserves Casing in Deepwater Development Wells

Casing Wear in Previous Well

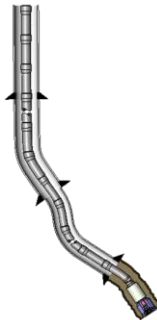
A Deepwater GOM Operator drilling a multiple entry development well experienced severe casing wear across the kick-off point (KOP). Wear was experienced after only 100 rotating hours using a rotary steerable system with 120-160 RPM. The wear was attributed to cumulative rotating hours from previous side tracks out of the same wellbore.

WWT Modeling to Identify Contact Forces on Past and Future Well

WWT back modeled the torque and drag for the side track and the severe wear was at the area of the well with the highest contact forces. Modeling was then run for a future sidetrack and similar side forces were seen. A Non-Rotating Protector (NRP) placement covering the high side force zone for the entire bit run was presented. Along with casing wear protection, a 20% reduction in torque was also modeled.

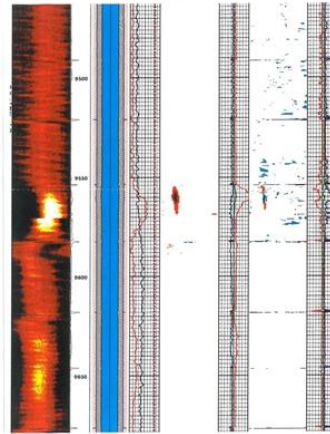
Casing Protection and Additional Side Tracks

WWT NRPs were shipped offshore and installed to protect the build section. While drilling, very little metal was recovered and torque was reduced around 25%. A Caliper log was run afterwards and the casing integrity was maintained. Additional sidetracks from the same wellbore were possible due to running NRPs and preserving the casing.

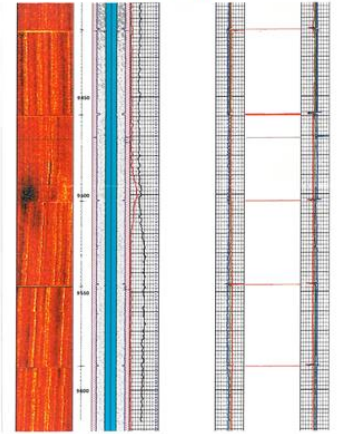


Location: USA Gulf of Mexico
Well Type: Deepwater directional
Objective: Casing Protection and torque reduction
Solution: WWT SS NRPs across KOP
Results: Casing protection, 25% torque Reduction, and additional side tracks

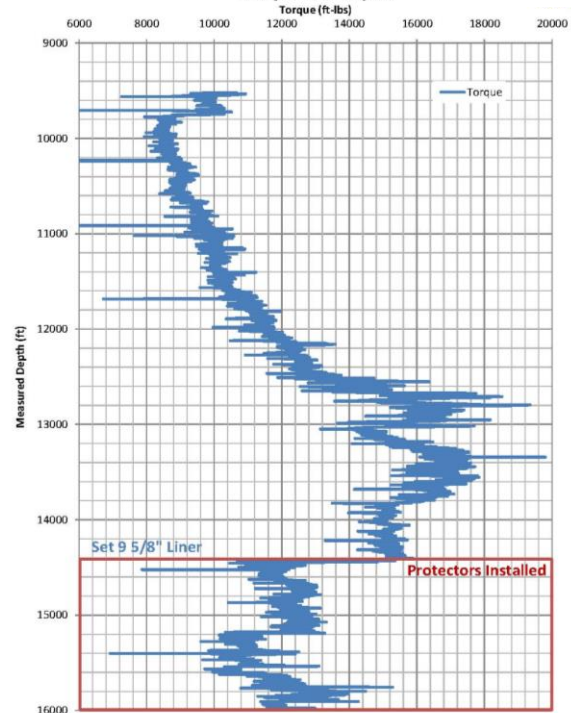
Severe casing wear through KOP on previous sidetrack



Casing wear after use of protectors



Torque vs. Depth



WWT Non-Rotating Protectors
www.wwtinternational.com