

Canadian Operator Improves Weight Transfer in Horizontal Well

WOB issues when drilling horizontal well

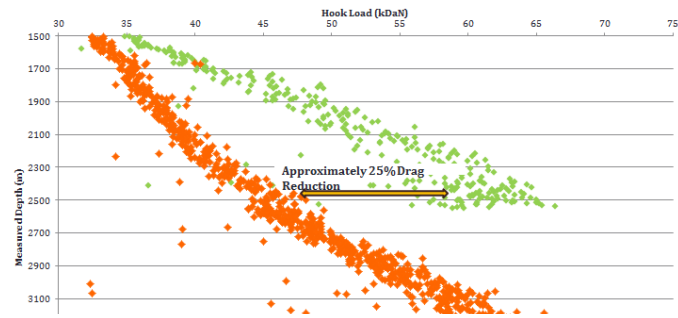
A Canadian shale play Operator experienced reduced differential pressure and increased torque and drag while drilling the lateral section utilizing a conventional motor assembly. Increasing the WOB at the surface decreased both the differential pressure and ROP while increasing torque indicating weight transfer issues.

WWT Modeling Identifies Buckling

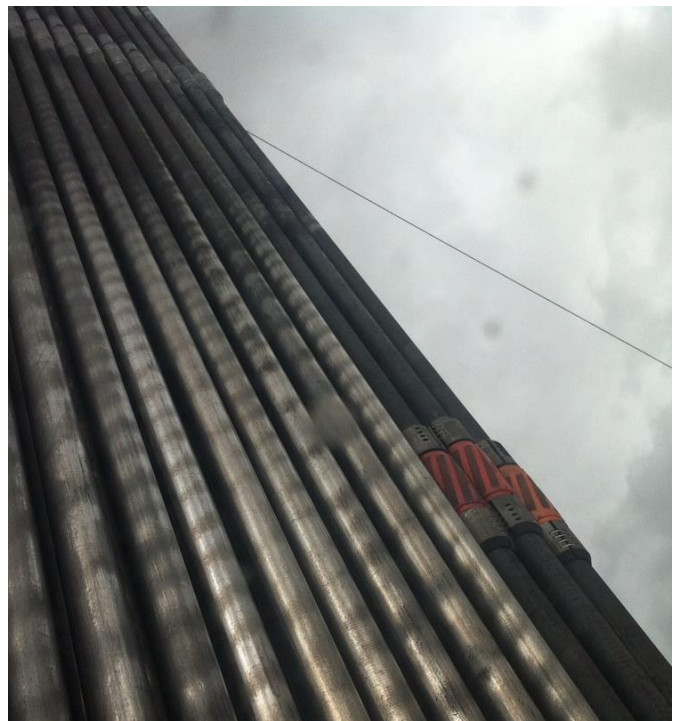
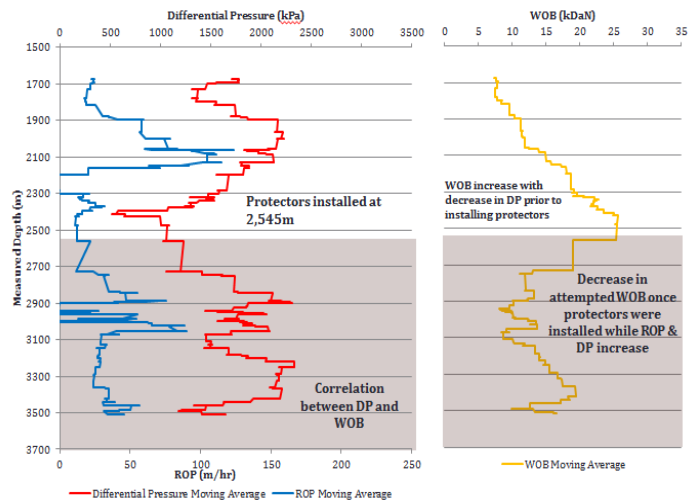
WWT torque and drag modeling identified high contact forces and that the drillstring was experiencing helical buckling. When modeling the benefits with NRPs installed, it was determined that reducing friction and stabilizing the pipe could provide significant benefits. WWT and Operator implemented a Non-Rotating Protector (NRP) placement installing SS3 protectors mid span on 150 joints starting at the heel of the well. Protectors would move into open hole keeping the build section covered to TD.

Improved Weight Transfer, Reduced Torque and Drag

After installing WWT NRPs, an increased ROP and differential pressure was achieved with less required WOB. Torque was reduced 24% and drag was reduced 25%. By reducing buckling in the string along with reducing sliding and rotating friction, the customer was able to reach TD while maintaining optimal ROP.



Location: Canada
Well Type: Horizontal Shale
Objective: Improved weight transfer
Solution: WWT SS3 installed mid-span above and through build section
Results: Reduced Buckling and Improved Drilling Performance



WWT Non-Rotating Protectors
www.wwtinternational.com