

WWT Non-Rotating Protectors Prevented Additional Casing Wear

High Metal Recovery

An operator encountered high volumes of metal returns over the shaker while drilling the production hole, creating a concern for casing wear. Intermediate 9-5/8" casing was set at approximately 12,800 ft MD. An open hole side track was drilled at 6,800 ft MD prior to running intermediate casing, suggesting a potential area for casing wear. The operator contacted WWT for a solution to mitigate additional casing wear by deploying Non-Rotating Protectors (NRPs).

Well Analysis and NRP Proposal

WWT analyzed the well and presented a technical recommendation to protect two areas of concern in the vertical section as indicated in the side force plot to the lower right by blue and orange shaded zones. Several shallow dog-legs up to 4 deg/100ft from 1,800 to 3,100 ft MD resulted in analyzed side forces up to 6,000 lbs/jt requiring 37 stands of NRPs. In addition WWT recommended installing 11 stands of NRPs across the sidetrack area at 6,800 ft MD. After reviewing WWT's technical proposal with the operator, equipment and a service hand were mobilized immediately to the rig site.

Metal Recovery Significantly Reduced

Metal recovered from the ditch magnets was up to 12 lbs per day prior to installing NRPs. A pipe trip was made at 14,000 ft MD to pickup NRPs per the recommended program. Recovered metal the day after NRPs were installed was reduced to less than 0.5 lbs, allowing the operator to successfully TD the well by eliminating the need for expensive remedial casing work.



Location: North America
Well Type: Horizontal
Objective: Casing Protection
Solution: WWT NRPs
Results: Recovered Metal Significantly Reduced

