Latin American Operator Protects Casing in Re-Entry Wells

Casing Wear in Re-entry Wells
An operator drilling re-entry wells had a concern of casing wear due to corrosion and also additional drill pipe revolutions while sidetracking. Milling the cased-hole window using a whipstock required approximately 80 hours of rotation on the existing casing and 550 kg (1,210 lb) of metal swarf was recovered at the surface. Once a liner was run through the sidetrack point, the abrupt deviation created high contact forces thus creating concern for casing wear.

WWT NRPs Create Tool Joint Stand Off
WWT Non-Rotating Protectors (NRPs) installed 1.4m (4.6 ft) above the tool joint connection created stand-off between the drill pipe and casing. NRPs were installed 1/stand where side forces exceeded 2,500 lbs/ft in the vertical section of the wellbore. Tool joints adjacent to the installed NRPs remained unpolished, indicating successful tool joint standoff.

USIT Log Indicates Casing Protection
A USIT log indicated only 5-10% wear was measured at the side track point, which protectors covered the entire run. Even with partial coverage, the maximum wear experienced in the 9 7/8” liner was below 14%, well below operator’s requirements.

Location: Latin America
Well Type: Build-and-Hold Re-Entry Sidetrack
Objective: Casing Protection
Solution: WWT NRPs
Results: Minimal Casing Wear at Sidetrack Point

Polishing of tool joints indicates casing protection using NRPs:
With NRPs
No NRPs