VectorZIEL Rotary Steerable System

VectorZIEL 800 Rotary Steerable System drills first well in Mexico

Technology

NOV's VectorZIEL™ rotary steerable system (RSS) features inclination azimuth and gamma ray capabilities within 5 ft of the bit along with and an integrated pulser. VectorZIEL™ is available to independent directional drillers and operators world-wide.

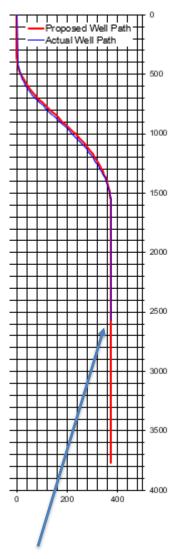
Challenge

A well located in Tamaulipas near Reynosa, Mexico, which is a new frontier for NOV Rotary Steerable Systems, was challenged with a S-shaped directional profile. The VectorZIEL RSS system was chosen to tackle this difficult profile while maintaining a $2^{\circ}/30$ m build section and a $1.2^{\circ}/30$ m drop section. The $12-\frac{1}{4}$ " interval was planned from 300 m to 3,837 m.

Results

The VectorZIEL™ 800 system demonstrated exceptional directional control and reliability. The VectorZIEL™ 800 system endured 250 circulating hours, 230 onbottom drilling hours and performed a total of 37 downlinks and drilled the wellbore trajectory per plan. The VectorZIEL system also produced higher ROP and drilled a smoother borehole than a conventional bent motor assembly and MWD system drilling through slide-rotate intervals, while providing precise directional control reducing torque and drag, and stuck pipe risk.





9 1/2" Casing Point

