VectorZIEL Rotary Steerable System

VectorZIEL 800 RSS used in a Vertical Application in Turkey

Technology

NOV's VectorZIEL[™] rotary steerable systems (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

The well was drilled in Turkey which is a new market for NOV Rotary Steerable Systems. Natural formation tendencies in off-setting wells resulted in significant deviations from vertical. Current well plans required precise verticality despite any natural drift tendency.

Results

The VectorZIEL 800 demonstrated exceptional vertical control and reliability. The VectorZIEL 800 was in the hole for 165 hrs and drilled 1028m. The VectorZIEL 800 BHA drilled out the 13 3/8" casing shoe and immediately brought the well from 0.4 degrees inclination to 0.05 degrees inclination. The trajectory was maintained at or below 0.05 degrees inclination for the remainder of the run to total depth. The total depth for this well was 1301m. The system produced higher ROP and delivered a smoother borehole while providing reduced torque and drag, and stuck pipe risk.

Inclination (deg)

