

VectorEXAKT Rotary Steerable System



VectorEXAKT RSS delivers precise vertical wellbore in Kazakhstan

Technology

Our VectorEXAKT™ 900 rotary steerable system (RSS) delivers higher ROP and precise directional control in vertical or inclined boreholes. This integrated drilling and measurement tool incorporates an inclination survey package within 5 ft of the bit along with a pulser to deliver real-time data transmission.

Challenge

Our client needed to maximize ROP while maintaining verticality across a 1,280-ft (390-m) 17 ½-in. vertical section in an onshore gas field in Kazakhstan.

Results

The vertical section was drilled at an average ROP of 32 ft/hr (9.7 m/hr), and inclination was maintained at less than 0.05° across the entire section. Final displacement of the well was only 0.04-in. (1.0-cm) south and 0.05-in. (1.3-cm) west.



Hole size (in)	Depth in ft (m)	Depth out ft (m)	Total footage ft (m)	Inc in (°)	Inc out (°)	ROP ft/hr (m/hr)
17 ½	2,657 (810)	3,937 (1200)	1,280 (390)	0.05	0.01	32 (9.7)

