

VectorEXAKT Rotary Steerable System



VectorEXAKT vertical RSS delivers precise vertical control across a 24-well campaign

- Location: Onshore China
- Operator: Chinese NOC

Technology:

Our VectorEXAKT™ 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 drill 13³/₈ – 17½-in. vertical holes across multiple wells in the Tarim and Xinjaing Basins. This field is known for its aggressive dipping beds and hard, interbedded formations.

Results

24 vertical wells were drilled across the project with a total footage of 198,000 ft (60,400 m). The deepest section was drilled to a depth of 14,200 ft (4300 m). Precise vertical control was maintained across all wells and is demonstrated by data from two wells presented below.



	Well A		Well B	
	Run 1	Run 2	Run 1	Run 2
Depth In	244 m	1,062 m	386 m	1,122 m
Depth Out	1,062 m	1,801 m	1,122 m	1,345 m
Interval	818 m	739 m	736 m	223 m
Inclination In	1.57°	0.42°	0.82°	0.02°
Inclination Out	0.42°	0.02°	0.02°	0.02°
ROP	11.2 m/hr	5.8 m/hr	3.3 m/hr	3.3 m/hr