RSS tool drills 463-m build section from 1.5° to 84.9° in one run

LOCATION	FIELD
Shanxi, China	CBM
LITHOLOGY	**DATE**
Mudstone	April 2018

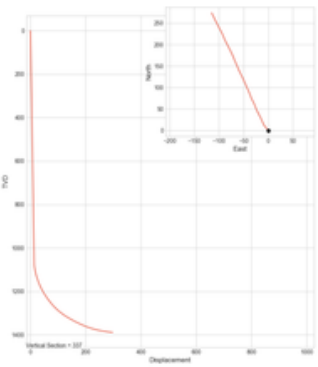
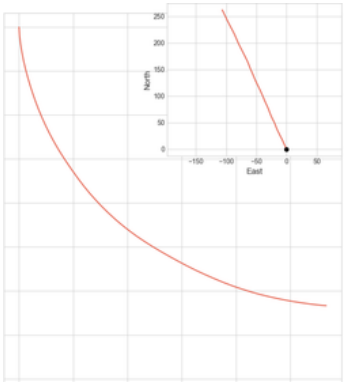
TECHNOLOGY

The VectorZIEL™ 600 rotary steerable system (RSS) features inclination, azimuth and gamma ray capabilities within 1.5 m of the bit along with an integrated pulser. The system achieves higher ROP, smoother boreholes and precise directional control to reduce drilling time and well costs in directional and horizontal wells.

CHALLENGE

The customer used the VectorZIEL 600 RSS to drill an 8½-in hole from vertical and land the curve in a mudstone formation.

RESULTS

Total footage drilled was 463 m in 62 drilling hours at an overall average ROP of 5.8 m/hr. The tool built from 1.5° to 84.9° inclination with an average build rate of 5.4°/30 m and an average DLS of 8°/30 m. It reached TD in one run, and no obvious wear was observed.

HOLE SIZE	DEPTH IN / OUT	INC. IN / OUT	INTERVAL	AVG. DLS	AVG. ROP
8½ in	1,072 / 1,535 m	1.5° / 84.9°	463 m	8°/30 m	5.8 m/hr