

VectorZIEL RSS drills entire curve, demonstrating build rate and tight directional control



LOCATION	WELL TYPE
Navasota, Texas, USA	Build-and-turn horizontal

TECHNOLOGY

The VectorZIEL™ 600 rotary steerable system (RSS) features inclination, azimuth and gamma ray capabilities within 5 ft of the bit along with an integrated pulser.

CHALLENGE

A build-and-turn horizontal well with planned dogleg severity of up to 7°/100 ft was drilled at a full-scale test rig in Navasota, Texas, that replicates demanding field drilling conditions.

RESULTS

The VectorZIEL 600 RSS drilled the curve from 11° to 86° inclination, despite relatively soft conditions in the claystones and unconsolidated sandstones at the end of the curve, and demonstrated strong build-rate capability. The RSS achieves higher ROP and smoother boreholes with precise directional control, helping reduce torque, drag and stuck-pipe risk.



Entire curve drilled from 11° to 86° inclination

INCLINATION	PLANNED DLS	AVG. DLS RANGE	AGGRESSIVITY	FORMATION
11° to 86°	up to 7°/100 ft	5.1–8.9°/100 ft	30–100%	Claystone, sandstone