

D-Tech RST Executes High-Angle Tangent While Eliminating 1.2 Drilling Days For North Dakota Operator

The Challenge

- A North Dakota customer wanted to complete an infill development project and the application called for 1,500 to 2,200-ft stepouts in the intermediate section of the well.
- This drilling plan required the operator to build and hold between 15 and 20 degrees of inclination and hold that desired inclination for 8,000 ft.
- The customer attempted to complete the section with a conventional bottomhole assembly (BHA) and with a competitor's rotary steerable system.
 - Conventionally, the slide time severely slowed down the overall rate of penetration (ROP) and increased the time to complete the section.
 - When utilizing other rotary steerable tools (RST), they found that the ROP was less than ideal and their expectations were not met.

The Solution

- The operator chose to run the D-Tech RST and liked the flexibility of running the same directional package with their preferred directional company (Total Directional).
- D-Tech worked with all parties to design well-specific operating guidelines and execute the wellbore with their goals and requirements in mind. A customized SOP was produced and utilized to drill the wellbore and meet low-dogleg severity objectives.
- Post-run review was constructed and delivered to evaluate performance, which allowed the customer to improve the SOP and provide continued improvement for future runs.

The Benefit

- The 6,381-ft interval was completed in 42 drilling hours, eliminating 1.2 days from the next best high-angle tangent offset.
- The D-Tech RST eliminated micro-doglegs that occur when drilling tangents conventionally.
- The operator saw increased overall ROP on the run and the improved wellbore consistency reduced drag, allowing for improved ROP on subsequent runs.
- The higher ROP that the RST achieved in hole section allowed the customer to reevaluate the drilling program to include higher-angle tangents and additional wells on a pad.

