Schlumberger

Repsol Eliminates 1 Bit Trip Using NeoSteer CL ABSS, Pennsylvania

At-bit steerable system increases ROP 25% while drilling curve and lateral in a single run, saving an average of 28.6 h per well in the Appalachian Basin

Repsol saved 28.6 h and one bit trip per well using the NeoSteer CL* curve and lateral at-bit steerable system (ABSS) to drill the curve and lateral sections in a single run.

The operator's challenges

Repsol needed to increase the ROP in the curve, drill the curve and lateral in a single run, and avoid compromising dogleg severity (DLS) or performance in order to meet the plan requirements.

What they tried first

Before using the NeoSteer CL ABBS, Repsol used a conventional 2-run solution—but it did not enhance job performance.

What Schlumberger recommended

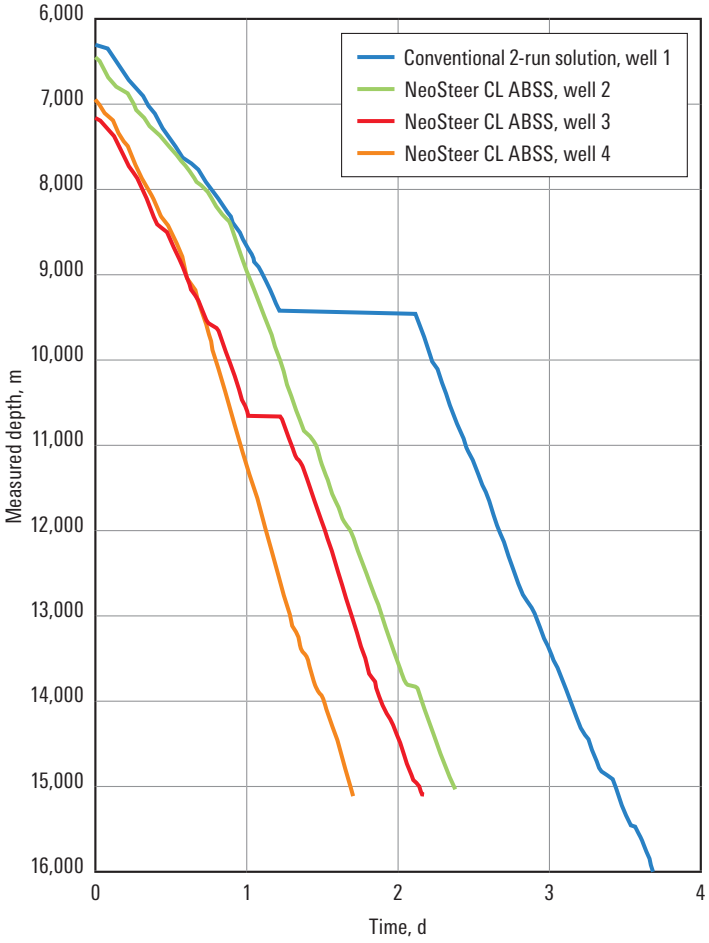
Schlumberger proposed using the NeoSteer CL ABSS with a HyperBlade* hyperbolic diamond element bit to improve ROP in the soft formations in the curve section and eliminate a trip to change the BHA.

What happened

Using the NeoSteer CL ABSS, Repsol drilled the curve sections at an average ROP of 160 ft/h and an average lateral ROP of 286 ft/h—a 30 ft/h improvement compared with traditional bit-and-RSS-technology. This system also eliminated the need to change the BHA after the curved sections by drilling the curve and lateral sections in a single run. Both of these improvements combined saved Repsol an average of 28.6 h per well.

Repsol plans to use the NeoSteer CL ABSS on more wells in this area in the future.

The NeoSteer CL ABSS.



After fine-tuning the NeoSteer CL ABSS performance, Repsol saved roughly 2 days on the last well alone, compared with the time it would have taken to drill the well with a conventional BHA.

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