Case History: HydroPull™



50 Composite Plugs Drilled in Midland Basin in a Single Run with a HydroPull™ Tool

Case Study, Spraberry Trend, Midland County, TX

- Casing 5 ½-in. 20 lb./ft.
- KOP 8,250 ft. TVD; PBTD 20,277 ft. MD
- 2⁵/₈-in. Coil Tubing
- 50 Composite Plugs

This well cleanout involved milling a total of 50 composite bridge plugs from a horizontal lateral almost 10,000 ft. long to a total measured depth of 20,277 ft. The liner was 5 $\frac{1}{2}$ -in. and the job was run on 2 $\frac{5}{6}$ -in. coiled tubing. The 3 $\frac{1}{6}$ -in. BHA consisted of a motor head assembly, dual back pressure valve, hydraulic disconnect, screen sub, 3 $\frac{1}{6}$ -in. High Flow-High Impact Tempress HydroPullTM, 3 $\frac{1}{6}$ -in. Oil States Energy Services motor and a 4 $\frac{5}{6}$ -in. tri-cone rock bit. Water with pipe-on-pipe friction reducer was pumped at 4.0 bpm increasing to 4.5 bpm towards the toe of the lateral. Nitrogen was commingled with fluid after the 34th plug and continued to near TD.

All 50 plugs were milled without any short trips and 5-20 bbl gel sweeps followed the milling of each plug. The wellhead pressure ranged from 80 to 500 psi and the pump pressure ranged from 2,900 to 3,700 psi.

This job was completed in 45 hours with a single High Flow-High Impact HydroPull[™] with an average plug milling time of 5 minutes per plug.

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