

Case History: HydroPull™



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

Case Study, Wolfcamp Trend, Midland County, TX

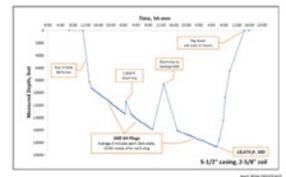
- Casing 5 1/2-in. 20 lb./ft.
- KOP 8,300 ft. TVD; PBTD 18,674 ft. MD
- 2 5/8-in. Coil Tubing
- 64 Composite Plugs

This impressive well cleanout involved milling out a total of 64 composite bridge plugs from a lateral nearly 10,000 ft. long in an 18,674 ft. MD horizontal well. The liner was 5 1/2-in. and the job was run on 2 5/8-in. CT. The 3 1/8-in. BHA consisted of a motor head assembly, dual back pressure valve, hydraulic disconnect, screen sub, 3 1/8-in. High Flow-High Impact Tempress HydroPull™, 3 1/8-in. Oil States Energy Services motor and a 4 5/8-in. tri-cone rock bit. Water with friction reducer was pumped at 4.25 bpm increasing to 5.0 bpm towards the toe of the lateral. All 64 plugs were milled without incident and 10 bbl gel sweeps followed the milling of each plug.

Two short trips were utilized to ensure a good cleanout of sand and plug debris, including one trip to vertical after milling the 46th plug. The wellhead pressure ranged from 250 psi to 420 psi and the pump pressure ranged from 2,800 psi to 4,250 psi.

This job was completed in a single HydroPull™ run in 57 hours with an average plug milling time of 5 minutes per plug.

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