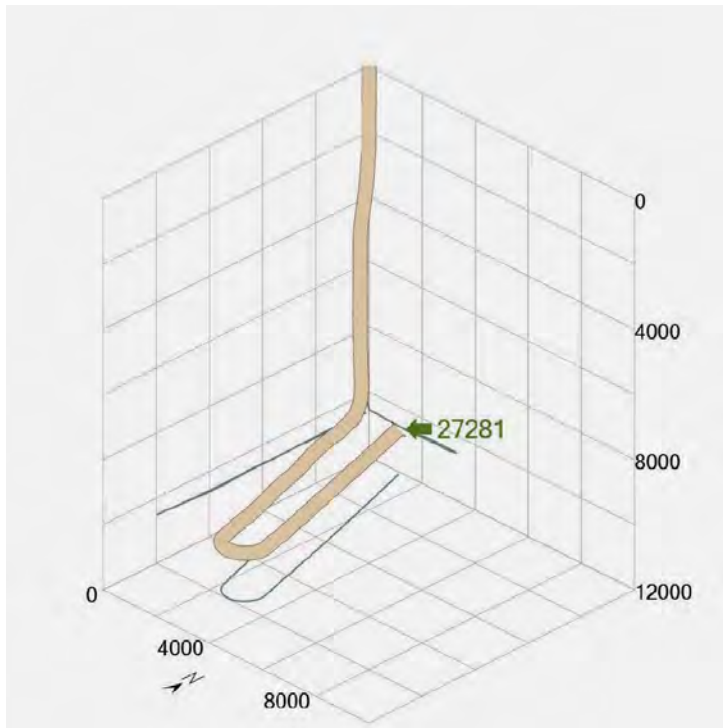


Horseshoe Well Drillout

Extended-Reach Horseshoe Well Drillout in the Permian Basin

DETAILS

Location	Ward County, Texas
Formation	Eagle Ford
Casing Size	5-1/2" 20#
Conveyance	2-5/8" CT
Total Measured Depth	27,281'
Operation Type	Composite plug drillout
Tools Used	3.50" MetalMax Motor 3.50" WavForce XRV



An operator in the Permian Basin required a drillout of 78 composite plugs in an extended-reach horseshoe well. The well featured a MD of 27,281' and a lateral section of 17,133'. Pre-job modeling indicated that the operation was technically achievable and was used to optimize the execution plan.

The drillout was conducted using 2-5/8" coiled tubing and a BHA consisting of a 3.50" MetalMax motor paired with a WavForce XRV. The first plug was tagged at 10,911' and pump rates were maintained between 6.0 and 7.3 bpm throughout the job to support effective circulation, debris transport, and drilling efficiency.

As the operation progressed deeper, drillout performance remained consistent across all 78 plugs. The WavForce XRV helped mitigate frictional drag, improve WOB, and maintain effective tool conveyance through the lateral section. Hydraulic parameters were carefully managed to maximize debris removal while minimizing the risk of lock-up events.

The operation was completed in a single run in approximately 45 hours from open to close, reaching PBSD at 27,172' and completing what was, at the time, the longest measured-depth horseshoe well in the Permian. The operation demonstrated the effectiveness of combining detailed engineering analysis with fit-for-purpose tools to execute a highly technical intervention in a challenging well.

ONE COMPANY ONE SOLUTION

thrutubing.com

