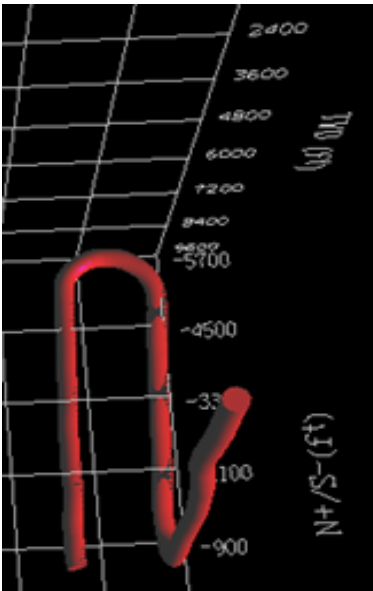


U-Shaped Lateral Well Drillout using WOS BHA

January 2024

A major oil and gas operator enlisted Workover Solutions to provide a drillout BHA along with a Tool Specialist to drillout 5 U-Shaped Lateral wells. This was the first time the operator was drilling out U-Lateral wells, therefore had limited information about them. For this application, 2-7/8" 7.9# PH6 was utilized, and WOS chose to run the InterrogatR Downhole memory tool to capture data points from these U-lateral wells. The in-built flexshaft in the PowR Motor and the flex sub enhanced the durability of the BHA for this complex operation. Combining the WOS PowR Motor with the AV SUB, gave the operator the opportunity to exceed the pumping rate and have better hole cleaning during



the drillout operations. A pre-well Torque and Drag modeling was performed on all the wells prior to the drillout operation. Having modeled over 1000 wells in the past, it gave the team an increased confidence in the modeling results and at which depth it would encounter high torsional value. Based on this the WOS personnel made a decision to start using the pipe-on-pipe as it has proved to be affected in the past whenever high torques and pick-up weights have been encountered and it helps in reducing that metal-on-metal friction between the tubing and the casing. Having optimal weight on bit helped in retrieving smaller plug cuttings on surface and the bit dull condition was excellent as well.

Application Challenges

- Drillout U-shaped Lateral wells
- Perform Drillout in a single run
- High pick-up weight expected off bottom
- High torque expected during the latter stages

WOS Results

- Drilled out 5 U-shaped Lateral wells successfully
- Ran WOS InterrogatR to capture downhole data
- Provided pre-well Torque and Drag modeling
- Supplied the Enviro-Torque pipe-on-pipe

Job Overview

Application:	Wolfcamp A
Location:	Reeves County, TX
Operation:	Stickpipe Drillout
Date:	January 2024
Tool Conveyance:	Hydraulic Workover Rig
Casing Specs:	5-1/2" 20#