MIDLAND OPERATOR INCREASES FOOTAGE PER DAY BY ALMOST 94% & ENHANCES BHA RELIABILITY

Challenge

An operator working in the Midland Basin had been achieving mid-tier drilling performance overall but had been falling short in one key area. Their intermediate string operations were consistently the slowest when compared to similar offset operations.

They were drilling 1,400 feet per day, while top operators were achieving nearly 3,900 feet per day; and while they were using an average of 3.3 intermediate BHAs, the top-performing operator was averaging just 1. H&P was tasked with delivering a solution to help the client reach its production potential.

Solution

To better understand the host of conditions affecting the operator's performance, H&P performed a comprehensive evaluation of the flow rate, rate of penetration (ROP), and weight on bit (WOB) for both Midland and Martin counties when compared to offset competitors. It was determined that, by deploying FlexDrill on their rig, the operator could achieve greater performance.

FlexDrill

H&P's FlexDrill is a technology-based tool that automates the detection of and response to a host of downhole conditions. With FlexDrill, wells are able to manage and finetune setpoints at a much higher rate than offset wells – automating critical adjustments to WOB, RPM, differential pressure zeroing and more. These windows are built in accordance with drill bit knowledge or selection along with the Downhole motor configuration in conjunction with the elected BHA to optimize the rock removing process.

Outcomes

After implementing FlexDrill on 15 of the operator's wells, an immediate increase in performance was achieved.

- > Footage per day jumped from 1,296 feet per day to 2,520 feet per day,
- > Average operating time reduced from 4.78 days to just 2.46 days.
- > Savings of 2.32 days and \$116,000 on intermediate string operations

The optimized ROP and overall drilling performance achieved made them more competitive in the region.



PROJECT OVERVIEW

Location Midland Basin

Technology & Services Used H&P's FlexDrill





