CASE STUDY

FlexDrill

Improving Efficiencies and Preserving Bit Life By Automating eDriller Set Point Optimization

WELL PROGRAM STATS

· Winkler County, TX
· Wolfcamp Formation
· One Well Previously Drilled on The Same Pad
· Initial Spud to Total Depth: 32.4 Days at 22,330 ft.

OBJECTIVE

In the Delaware Basin, one H&P customer has seen significant performance improvements when utilizing FlexDrill™.

Focused on providing maximum efficiencies in their well program, this operator consulted with H&P on areas to improve performance by decreasing their days on well, and lowering their bottom hole assembly (BHA) count.

H&P recommended FlexDrill due to the multiple ways that it could help the crew achieve the desired results. FlexDrill uses eDriller set point automation to increase the rig's efficiency, reducing the overall mechanism specific energy (MSE), and downhole dysfunctions like whirl and stick slip. FlexDrill also preserves bottom hole assemblies (BHAs) reducing the flat time attributed to tripping out and in the hole to change out bits and tools.

The configurable and consistent bit engagement ensures optimal contact with the formation, further preserving bit life, reducing bit and BHA torsional and lateral vibration, leading to a smaller number of total BHAs required to drill the well.

As a result, additional BHA change-out time and tripping time is reduced, contributing to a reduction in the total number of days on well. The system automatically stages drilling set points after tagging bottom, further reducing risk and accelerating the well program. The operator installed FlexDrill on the rig and tracked performance for the next well, where they saw impressive results.

RESULTS

After one well, the paradigm shift is clear and specific achievements were made.

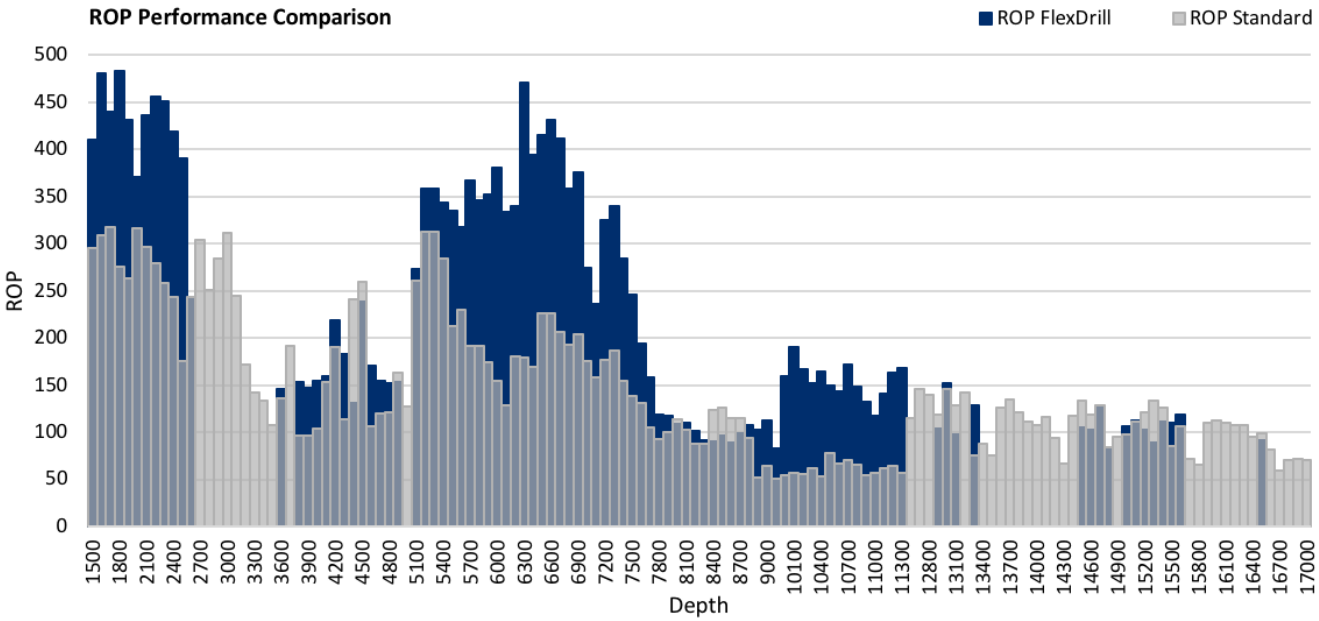
Time Savings
· 26% time savings due to 11-day improvement over the previous well

Increased ROP
· 61% average ROP improvement when FlexDrill was in use

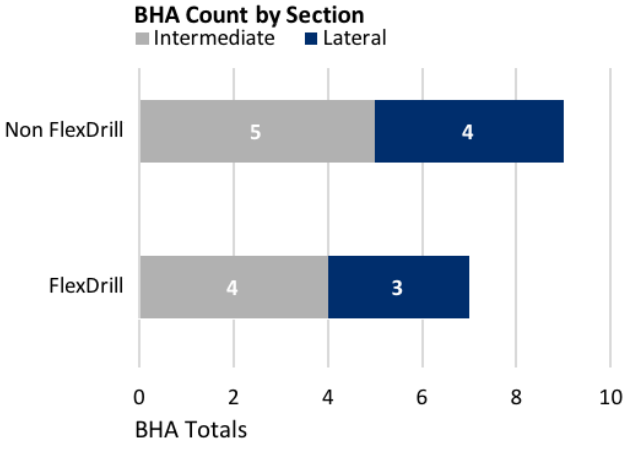
Reduced BHA Count
· 9% total BHA count reduction

· One fewer BHA used in an area of especially hard drilling

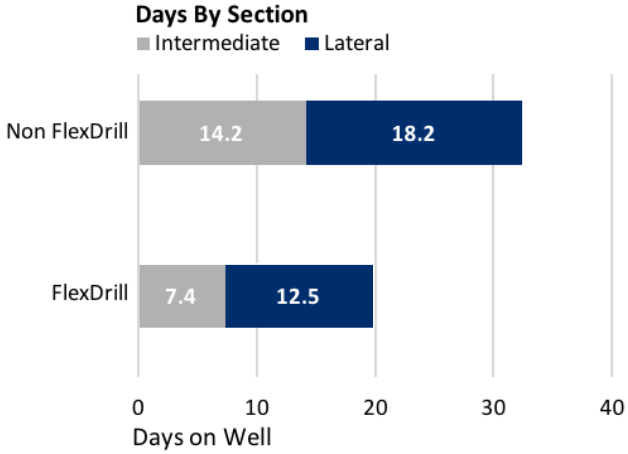
FlexDrill is designed to achieve maximum efficiencies while reducing the learning curve to achieve repeatable results.



FlexDrill improved the overall ROP by an average of 61% at depths when it was used.



The well drilled with FlexDrill used one fewer BHA in both the intermediate and lateral sections due to enabling proper bit engagement and reduced downhole vibration.



The well drilled with FlexDrill saved 11 days over the course of the well, nearly cutting the intermediate time in half.

* PAST PERFORMANCE IS NOT A GUARANTEE OF FUTURE RESULTS. ANY STATEMENTS REGARDING PAST PERFORMANCE ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND ACTUAL RESULTS MAY DIFFER MATERIALLY.

ABOUT US

We're rated 1st by our customers 11 years in a row because no one designs, fabricates, and operates automated drilling performance packages as well as we do. H&P reduces risk, lowers total cost of operations and accelerates well programs better than anyone. Our long-standing commitment to safety reinforces the importance we place on people and our ability to recruit and retain top talent to serve our customers.

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