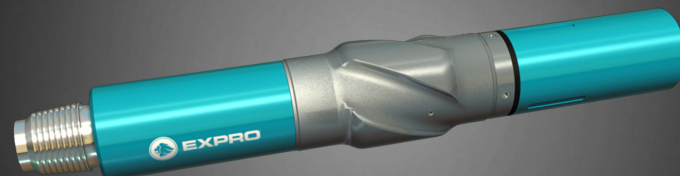


Expro Excellence

HI TOOL® enables smooth, single-run drilling in challenging 22-in section

Coretrax | ADVANCE



Objectives and background

- A major operator in KSA required a solution to mitigate drilling shocks and vibrations while drilling a challenging 22" surface section with a motor-MWD BHA
- Previous offset sections had experienced severe lateral and axial shocks, drillstring twist-offs and over-torqued connections, increasing the potential for BHA failures and costly non-productive time (NPT)
- The section consisted of heterogeneous formations, including carbonates, marl/shale and evaporites. Changes in formation response created additional potential for bit and BHA excitation and drilling dysfunction
- The objective was clear: reduce damaging shocks and dynamic loading, protect the MWD and drillstring, minimize the risk of twist-offs and over-torqued connections, and drill the entire 22-in section shoe to shoe in a single trip

Expro Excellence

- Expro deployed its 21-7/8" HI TOOL® as part of the 22" motor-MWD BHA to enhance drilling dynamics and mitigate shock and vibration
- Positioned directly above the 11 1/4" mud motor and below the MWD, the HI Tool provided mechanical isolation between the bit/motor assembly and the upper BHA. This configuration helped reduce the transmission of drilling-induced shocks and vibrations to the MWD and drillstring, reducing exposure to vibration-related fatigue and potential equipment failure
- The HI Tool also provided a second stabilization point above the motor, enhancing BHA stability and enabling the bit and motor to drill with reduced impact from drillstring harmonics
- The result was a smooth, stable drilling response throughout the section, with directional drilling feedback confirming the HI TOOL was highly effective in controlling shocks and vibrations

Value to the client

- 3,195 ft of 22" section successfully drilled shoe to shoe in a single BHA run
- No drillstring twist-offs or over-torqued connections, overcoming key dysfunctions experienced in previous offset sections
- Smooth drilling performance with stable parameters maintained throughout the run
- Reduced shocks and vibrations, helping protect the MWD, BHA and drillstring from damaging dynamic loads
- Reduced exposure to BHA failure and associated NPT
- Highly favorable field performance supporting the continued use of the HI TOOL in future 22" motor-MWD BHAs

Reduction of rig time



Safety

