



Client Challenge

An operator in the Delaware Basin faced challenges with shock and vibration, which were causing failures in the MWD tools and the bit. The operator needed a solution to mitigate these issues and prevent equipment failure while drilling three-mile laterals through an abrasive formation.

Our Solution

WWT's Silencer, featuring an improved sleeve design with low-friction blades, was installed directly behind the motor to target vibrations near the MWD tools. The design modifications also included improvements for easier field installation. The Silencer was used for a final run to total depth (TD), starting at a depth of 16,907 ft and ending at 22,815 ft MD, for a total run length of 5,894 ft. at 7,600 ft TVD.

Results

- 49% reduction in maximum lateral vibration compared to previous runs.
- Mitigated shock and vibration, leading to a more stable drilling process and reduced likelihood of MWD and bit failure.
- No added wear to the bit observed after the run with the Silencer.



Field-Installable Silencer

