

First 2 $\frac{1}{8}$ -in Neyrfor TTT Turbodrill in U.S. Cleaned Out HPHT Well in 59 Hours, GOM

Thru-tubing turbodrill eliminates hard scale and maintains excellent condition after being pulled out of hole

CHALLENGE

Clean out calcium carbonate and unknown obstruction from 3 $\frac{1}{2}$ -in production tubing to expose blocked perforations below 22,000 ft.

SOLUTION

Use 2 $\frac{1}{8}$ -in Neyrfor TTT* thru-tubing turbodrill to clean out scale and pump acid through the system.

RESULTS

- Milled approximately 137 ft at 2 ft/min to expose perforations.
- Maintained excellent conditions after 40 bbl acid pumped and 59 operating hours.



Mill through calcium carbonate in GOM

An operator in the Mobile Bay, Gulf of Mexico (GOM) needed to mill through calcium carbonate and an unknown obstruction under extreme conditions below 22,000 ft with temperatures exceeding 400 degF and an inclination of more than 30°. This is the first time the operator attempted to clean out an HPHT well in the area. The operator previously used a high-temperature positive displacement motor (PDM), impact tool, and jet assembly, but none of them were able to deliver satisfactory results.

Clean out scale, acidize well, and restore production

Schlumberger recommended using the 2 $\frac{1}{8}$ -in Neyrfor TTT thru-tubing turbodrill to clean out the scale while performing an acidizing job in the HPHT well. The turbodrill has an all-metallic construction that can withstand temperatures up to 572 degF and be used with exotic fluids and acids. In addition, the turbodrill's high speed produces small cuttings that are easy to get out of hole. Its highly reliable turbine system enables it to facilitate multiple runs.

Cleaned out HPHT well in 59 operating hours

The Neyrfor TTT turbodrill milled approximately 137 ft at 2 ft/min to expose perforations. In a total of 59 operating hours, including the acidizing job, the turbodrill was pulled out of hole in excellent condition.



The Neyrfor TTT turbodrill has an all-metallic construction, enabling it to withstand high temperatures and acid.