

Navi-Drill DuraMax improved drill time by 40% and ROP by 35%

40%

Improvement in drilling time

35%

Increased ROP

2

Days drilling time saved

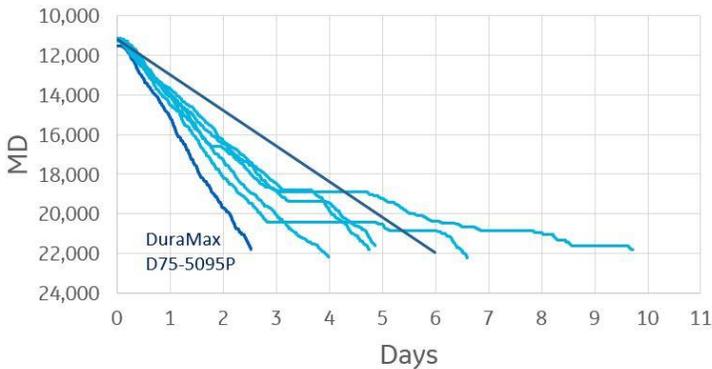
An operator in North Dakota's Williston Basin was developing a lateral Three Forks well. Drill bit consumption was reducing performance, with 8 drill bits damaged on 14 previous wells. Baker Hughes, a GE company (BHGE), had been using the BHGE 5-in. **Xtreme eXtend motor** with various bits with reasonable success but experienced moderate vibration levels, impacting measurement while drilling (MWD) reliability.

The BHGE team decided to use its new 5-1/8-in. **Navi-Drill DuraMax™ motor** with the BHGE **Dynamus™ drill bit** to reduce vibration and improve production and ROP. This proved to be a

winning combination. The team completed the lateral section 2 days faster than with offset wells, a 40% improvement. This combination also helped to reduce the vibrations by 20% to help complete the section in a single run.

BHGE drilled a 6-in. lateral of 10,294 ft (3138 m) in 46.3 drilling hours—a record performance—on the first attempt. The total time from the pick-up to the lay-down of the BHA was 3.3 days. This compared favorably to the operator's average Three Forks well time of 5.2 days and 68 hours per 10,000 feet (3048 m) drilled. Drilling days were reduced by 40% and ROP increased 35%.

Lateral Section Days vs Depth



Navi-Drill DuraMax improved drilling time by 40%. MD illustrates the measured depth in feet.

bhge.com

Copyright 2019 Baker Hughes, a GE company, LLC ("BHGE"). All rights reserved.

The information contained in this document is company confidential and proprietary property of BHGE and its affiliates. It is to be used only for the benefit of BHGE and may not be distributed, transmitted, reproduced, altered, or used for any purpose without the express written consent of BHGE.

Baker Hughes reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your BHGE representative for the most current information. The Baker Hughes logo, Navi-Drill DuraMax, and Dynamus are trademarks of Baker Hughes, a GE company, LLC. GE and the GE Monogram are trademarks of the General Electric Company.