

# AutoTrak eXpress and VertiTrak save operator 20 drilling days

Abrasive formations are commonplace in geothermal drilling; therefore, a nonrotating steerable drilling system is an appropriate choice. Casing and string wear is very common in abrasive formations, so frequent failures are experienced. The lack of string rotation minimizes and, in certain cases, eliminates the bottomhole assembly (BHA) borehole interaction, so the bottomhole assembly lasts longer.

**VertiTrak™, the automatic vertical drilling system** from Baker Hughes, a GE company (BHGE), was used in the 16-in. (406.6-mm) section, and **AutoTrak™ eXpress nonrotating automated, rotary steerable closed loop system** with integral modular mud motor was used in the 12¾-in. (311.15-mm) and 8¾-in. (212.725-mm) sections. VertiTrak capabilities ensure a perfectly vertical well path, so casing-borehole contact is minimized, and casing wear and tear is eliminated.

AutoTrak seamlessly integrates the high-power **Navi-Drill™ X-treme™ high-performance drilling mud motors** into the AutoTrak rotary steerable BHA for additional power and rpm at the bit.

Despite the fact that 43 days of drilling time were originally planned for this well, only 23 days were needed. The operator was favorably impressed with the quality of bit life achieved through the use of the automatic drilling system.

Record drilling performance, highly precise wellbore placement, and borehole quality were achieved through the use of high-performance mud motors, **Quantec™ PDC drill bits**, the solids control service, and the AutoTrak and VertiTrak drilling system.

This case history is presented for illustrative purposes only; results may vary between applications.

## Challenges

- Geothermal drilling in the Malm Formation in the Bavarian Molasse in Germany
- Aggressive scheduling, optimized drill bit life, and high borehole quality required

## Results

- Optimized drill life
- Eliminated 20 planned drilling days
- Optimized drilling fluids and solids control service
- Achieved excellent bit life and record drilling performance

[bhge.com](http://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 VertiTrak, AutoTrak, Navi-Drill, X-treme, and Quantec are trademarks of Baker Hughes, a GE company, LLC. GE and the GE Monogram are trademarks of the General Electric Company.

79859