

AutoTrak Curve system delivered one-run performance in Eagle Ford well

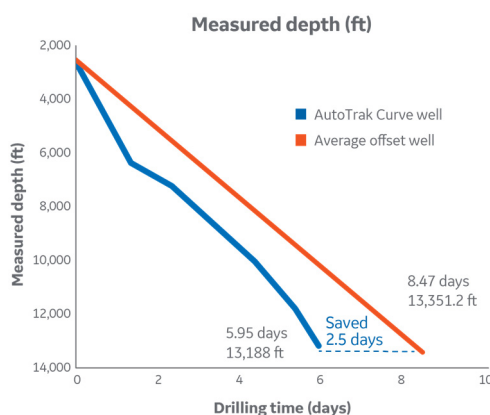
The Cheyenne Petroleum Company contacted Baker Hughes, a GE company (BHGE), to drill a well in the Eagle Ford shale that consisted of vertical, curve, and lateral sections exceeding 10,400 ft of total footage.

The curve section had an 8°/100-ft buildup rate (BUR), and Cheyenne needed to drill the build and turn profile while eliminating trips to change or adjust the bottomhole assembly. Cheyenne also wanted to minimize nonproductive time (NPT) and to stay within a 50-ft lateral window. Cheyenne chose to drill the section using the BHGE **AutoTrak™ Curve rotary steerable system** with a BHGE drill bit.

The AutoTrak Curve system allowed Cheyenne to drill out the 95.8-in. surface casing and subsequently drilled from 2,631 to 13,188 ft in one run for a total footage of 10,462 ft. The AutoTrak Curve system drilled the vertical section of the well and was able to kick off in the correct direction, building to 88° inclination with an 8°/100-ft BUR. Once the curve was landed, the system drilled the entire

lateral section. The system maintained an average rate of penetration (ROP) of 90 ft/hr through the vertical, curve, and lateral sections.

The sections were accurately drilled in six rig days, and the AutoTrak Curve system's one-run performance was two days faster than the average for offset wells. With an average spread cost of \$40,000 for this particular rig, Cheyenne saved approximately \$80,000 in associated rig operating charges on this job.



Challenges

- Eagle Ford shale
- 8¾-in. hole consisting of vertical, curve, and lateral sections exceeding 10,400-ft total footage
- Curve section planned with 8°/100-ft BUR
- Needed to eliminate BHA trips and minimize NPT, while efficiently drilling build and turn profile
- Required to stay within 50-ft lateral window

Results

- Saved two BHA trips
- Improved ROP
- Drilled all sections in one run
- Eliminated two drilling days

bhge.com

Copyright 2018 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 and AutoTrak are trademarks of Baker Hughes, a GE company, LLC. GE and the GE Monogram are trademarks of the General Electric Company.