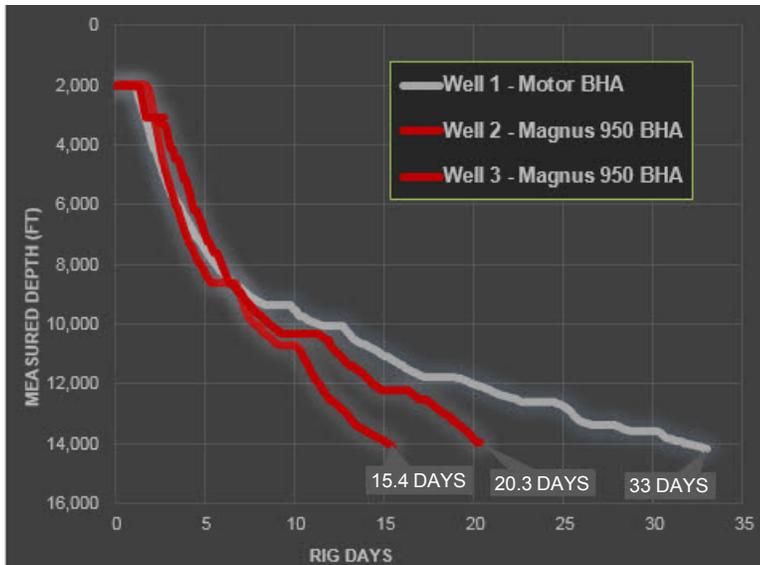


Magnus[®] RSS Delivers Peak Performance, Service Quality to US Operators on Deep 12 1/4-In. Sections



The Magnus rotary steerable system (RSS) bottomhole assembly (BHA) drilled 2 wells while saving 12.7 days and 17.6 days compared to a conventional motor BHA.

Objectives

- Improve drilling efficiency and reduce costs in 12 1/4-in. sections to deliver wells below the budgeted AFEs (authorizations for expenditure). The intermediate sections of these wells had historically been drilled with motors and required as many as six bit runs.

Our Approach

- Weatherford deployed the Magnus 950 RSS with an HEL[™] MWD (hostile-environment-logging measurement-while-drilling) system powered by a HyperLine[™] drilling motor to complete each long, 12 1/4-in. section.
- The motorized Magnus 950 BHA (bottomhole assembly) provided maximum ROP (rate of penetration) and drilling efficiency with bit speeds up to 250 rpm.
- The RSS autopilot mode function helped to hold low angle in the long sections and reduce the time to slide with standard motor drilling BHAs.
- The RSS used selective pad activation, independent pad control, and proportional steering to improve wellbore quality and stay downhole longer. Activating the pads only enough to keep the well on track significantly reduced wellbore tortuosity and increased drilling efficiency.

Value to Customer

- Compared to conventional drilling in 12 1/4-in. sections, the Magnus 950 saved up to 17 days of rig time, worth approximately US \$1 million.
- The Magnus RSS consistently delivered wells on target with less than 1.5% nonproductive time in these Midcontinent projects. These results indicate improved service quality and performance over competitors' systems.

LOCATION
Midcontinent US

FIELD
Scoop/Stack

WELL TYPE
Onshore, horizontal producer

HOLE SIZE AND ANGLE
12-1/4 in., 10°

CASING SIZE
9-5/8 in.

PRODUCTS/SERVICES

- Magnus 950 RSS
- HyperLine drilling motor
- HEL MWD system

