Magnus[®] Rotary Steerable System Delivers More Than 12,000-Ft Lateral in 1 Run

Objectives

- Drill the lateral section of an onshore well in a single run, at a rate of penetration (ROP) greater than 100 ft/hr (30.5 m/hr), and at a average distance of more than 2,000 ft/day (609.6 m/day).
- Eliminate nonproductive time (NPT) related to tool failures or performance issues.
- Create a smooth wellbore to facilitate completion running.

Our Approach

- A major customer operating in the Northeastern US had experienced numerous issues and failed to achieve the well objectives using multiple rotary steerable systems from competitors. In response, Weatherford proposed using the Magnus RSS to mitigate frequent trips for tool failures and poor performance.
- Weatherford deployed the Magnus RSS along with the HEL[™] hostileenvironment-logging MWD (measurement-while-drilling) system to drill the 12,482-ft (3,804.5-m) lateral well section.
- The Magnus RSS achieved drilling rates and distances per day that kept the operator on schedule.
- At the same time, the RSS traversed through significant dips and faults in the geological structure to drill the entire lateral section in a single run.

Value to Customer

- The Magnus RSS helped the customer to exceed its key performance objectives for the well by finishing the lateral section in just one run, drilling more than 2,000 ft/day (609.6 m/day), and saving 1 day of rig time in comparison to competitors.
- Although bit trips or tool failures constantly occurred with competitors' tools, the Magnus RSS drilled the well in a single run with zero hours of NPT and no safety incidents.
- The selective pad activation and proportional steering capability provided by the Magnus system resulted in a smooth, high quality wellbore that enabled the customer to efficiently run its completions string to total depth with no issues.



The Magnus RSS enabled a major customer to save 1 day of rig time compared to similar offset wells drilled with competitors' tools.

LOCATION Northeastern US

WELL TYPE Onshore, gas, horizontal

FORMATION Marcellus

HOLE SIZE AND ANGLE 8.75 in., 90°

DRILLING DEPTH

8,760 to 21,242 ft (2,670.0 to 6,474.6 m)

PRODUCTS/SERVICES

- Magnus RSS
- HEL MWD system



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