Magnus® Rotary Steerable System
Drills Top-to-Bottom Well in 1 Run

Objectives

- Drill an 8.5-in. well by maintaining the vertical within a 0.5° inclination, keeping the dogleg severity at 2.5°/100 ft (30 m), and reaching total depth (TD) within 33 ft (10 m).

Our Approach

- Weatherford deployed the Magnus rotary steerable system (RSS) and kicked off from vertical 50 ft (15.2 m) outside the casing shoe.
- The Magnus RSS increased the on-bottom rate of penetration (ROP) to 266 ft/hr (80.95 m/hr) compared to that of a motor at 197 ft/hr (60 m/hr).
- The RSS maintained the vertical within a 0.25° inclination.
- The RSS also maintained the well trajectory and kept the dogleg severity (DLS) at 2.46°/100 ft (30 m) to minimize borehole tortuosity and maintain good hole quality.
- The RSS reached a TD that exceeded the objective at 11.4 ft (3.46 m) within the target.

Value to Customer

- Using the Magnus RSS enabled the operator to surpass the preliminary objectives—including those for ROP, vertical inclination, dogleg severity, and total depth—and drill the onshore well in one run.