

Magnus[®] Rotary Steerable System

Drills Top-to-Bottom Well in 1 Run

Objectives

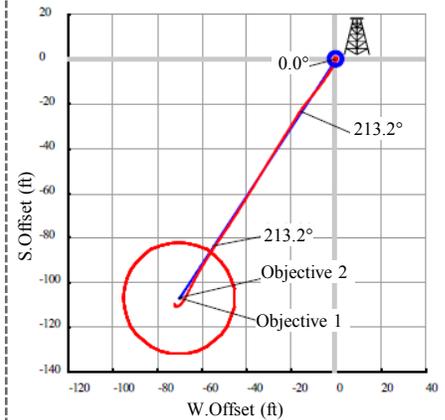
- Drill an 8.5-in. well by maintaining the vertical within a 0.5° inclination, keeping the dogleg severity at 2.5°/100 ft (30 m), and reaching total depth (TD) within 33 ft (10 m).

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.



The above graph shows the trajectory of the Magnus RSS, which maintained the desired inclination and reached the planned depth.

LOCATION
Mexico

WELL TYPE
Onshore, oil

HOLE SIZE AND ANGLE
8.5 in.

ON-BOTTOM ROP
266 ft/hr (80.95 m/hr)

MAXIMUM DLS
2.46°/100 ft (30 m)

PRODUCTS/SERVICES

- Drilling services
- Magnus RSS

