Weatherford®

REAL RESULTS

# Revolution® Rotary-Steerable Service Improves Drilling Efficiency and Reduces Differential Sticking Risk in Slimhole, High-Angle Wells

The *Revolution* RSS uses innovative point-the-bit technology to increase well value by providing superior wellbore quality and accurate wellbore placement while minimizing drilling risks. Unlike conventional push-the-bit systems, the *Revolution* RSS keeps the drill-bit face square to the rock and to the axis of the planned well path.

## Objectives

- Limit the expense of constructing new wellsites by drilling wells from existing locations, using high-inclination, high-displacement wellbore designs.
- Improve drilling efficiency and reduce the differential sticking risk for slimhole, high-angle, low total vertical depth (TVD) kickoff wells, compared to previous attempts using steerable motor assemblies.

## Results

- The *Revolution* 6 3/4-in. rotary-steerable system (RSS) was deployed to successfully drill the 8 1/2-in. hole sections.
- When slimhole functionality was required, the 4 3/4-in. *Revolution* RSS was deployed to drill the 6 1/8-in. hole, completing the 4,921-ft (1,500-m) tangent section in two runs, initiating the kickoff point, and building about 54° of inclination
- The kickoff from the vertical curve section and tangential sections was successful.

## Value to Client

- The *Revolution* RSS mitigated sticking problems with rotation through the entire section while improving hole cleaning to create a smoother, in-gauge wellbore.
- Average section drilling times were reduced.
- The improvements in milling operations saved the operator valuable rig time and associated expenses.

**Location**
Lizamba field, Vera Cruz, Mexico

**Well Type**
Slimhole, high-angle, low-TVD kickoff

**Hole Sizes**
8-1/2 in. and 6-1/8 in.

**Number of Wells**
Multiple

**Products/Services**
*Revolution* RSS system

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