

# Revolution® Core RSS Drills Well 4 Days Ahead of Schedule and Saves the Operator \$1.2 Million

## Objectives

- Drill a well—with two sections measuring 12-1/4 in. and 8-1/2 in.—in 15 days.
- Improve rate of penetration (ROP) while drilling and reduce drilling time. Using conventional motors, the total average drilling time in other wells in the field was 30 days. The average ROP for the 12 1/4-in. section was 12 ft/hr (4 m/hr), and the average ROP for the 8 1/2-in. section was 20 ft/hr (6 m/hr).

## Our Approach

- Weatherford recommended the Revolution Core rotary-steerable system (RSS) because of its capability to drill complex wellbores in a single run with real-time control.
- The team deployed one RSS in each well section. An 8 1/4-in. RSS drilled the 12 1/4-in. section, and a 6 3/4-in. RSS drilled the 8 1/2-in. section.
- Weatherford proprietary optimization and control software monitored several drilling dynamics—including stick slip, whirl, axial and lateral vibration, and trajectory—continuously and in real time.
- The RSS drilled the 12 1/4-in. section in a single run with an ROP of 63 ft/hr (19 m/hr). The RSS drilled the 8 1/2-in. section in a single run with an ROP of 93 ft/hr (28 m/hr).

## Value to Client

- The Weatherford optimization and control software enabled on-the-fly adjustments to drilling dynamics to maximize ROP and to complete each section in one run.
- The Revolution RSS increased ROP in the 12 1/4-in. section by 425%, and increased ROP in the 8 1/2-in. section by 365%.
- The RSS drilled the well within 11 days. This was 4 days ahead of schedule and 19 days faster than previous wells drilled conventionally, which saved the operator approximately US \$1.2 million.



Used to drill two well sections, the Revolution RSS significantly increased ROP and reduced rig time, which saved the operator 4 days valued at US \$1.2 million.

### LOCATION

Venezuela

### WELL TYPE

Onshore, production, oil

### HOLE SIZE

Section 1: 12-1/4 in.  
Section 2: 8-1/2 in.

### HOLE ANGLE

40°

### CASING SIZE

9-5/8 in.

### LINER SIZE

7 in.

### MEASURED DEPTH

8,376 ft (2,553 m)

### RATE OF PENETRATION

Section 1: 63 ft/hr (19 m/hr)  
Section 2: 93 ft/hr (28 m/hr)

### NUMBER OF RUNS PER SECTION

1

### PRODUCTS/SERVICES

- Revolution RSS
- Optimization and control software

