Revolution® RSS with HEL™ MWD System Improves ROP
To Save Operator More Than $1 Million in Eagle Ford Shale Well

The Revolution rotary-steerable system (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 RSS keeps the drill-bit face square to the rock and to the axis of the planned well path.

Objectives
• Improve drilling efficiency using an alternative to conventional directional drilling methods in an onshore horizontal well.
• Minimize rig time and operational expenditures.

Results
• Weatherford deployed its 6 3/4-in. Revolution RSS with measurement-while-drilling (MWD) tools to kick off from a near vertical inclination of 0.31° and built to 90°, holding 8°/100 ft (8°/30 m) to achieve a maximum inclination of 93.46°. The highest dogleg severity incurred on this well with the RSS was 13.46°/100 ft (13.46°/30 m).
• Near-bit inclination and HAGR™ high-temperature azimuthal gamma ray sensors were used to correlate real-time data and stay within the target zone.

Value to Client
• Using the RSS enabled the operator to improve the rate of penetration (ROP), eliminate the time spent sliding with a conventional motor assembly, and avoid an additional trip for a lateral assembly. These results shaved 18 days—valued at more than US $1,117,000—from the operator’s previous best well at the time.