



Weatherford®

REAL RESULTS

Hostile-Environment LWD System and Revolution® Rotary-Steerable Service Set Gulf of Mexico Distance and Pressure Records

Objectives

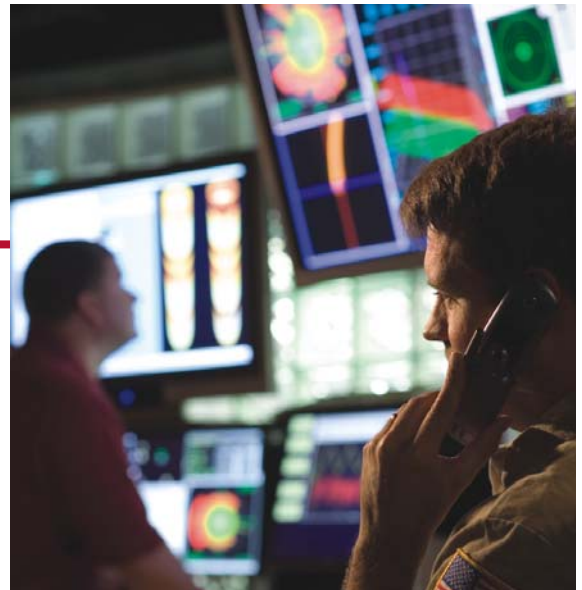
- Drill and evaluate a high-temperature, high-pressure deepwater well in the Gulf of Mexico.

Results

- Weatherford's LWD and *Revolution* rotary-steerable systems (RSS) were used in the 8 1/2-in. hole section to a depth of 29,314 ft (8,935 m). All equipment performed as required.
- Weatherford's LWD triple-combo services were then used to drill the 6-in. hole section, setting an onshore world record for triple-combo LWD tools of 34,182 ft (10,419 m) measured depth (MD) and 29,976 psi (206,677 kPa). Real-time data transmission at MD was more than 90%.
- The MFR™ multi-frequency resistivity sensor accurately predicted pore pressure and helped determine what type of wireline data to use at specific intervals.
- The BAP™ bore and annular pressure sensor tool, an integral part of Weatherford's hostile-environment logging (HEL™) MWD system, measured equivalent circulating density to aid in minimizing mud losses.
- The HAGR™ high-temperature azimuthal gamma ray tool provided lithology data and was used in conjunction with seismic data for better correlation.
- The IDS™ integrated directional sonde provided directional and toolface measurements.

Value to Client

- The reliable acquisition and surface transmission of formation evaluation and while-drilling data in an extreme environment were critical to this offshore project's successful execution.



The Weatherford LWD system is ideal for deep well and high-temperature, high-pressure drilling environments. The LWD system transmits real-time directional data, gamma ray data, bore and annular pressure data, downhole shock/vibration data, and all petrophysical measurements. It is rated to an operating temperature of 356°F (180°C) and to a pressure of 30,000 psi (206,843 kPa).

Location

Deepwater Gulf of Mexico

Total Runs

6

Operating Hours

747

Circulating Hours

368

Maximum Temperature

280°F (138°C)

Maximum Pressure

29,976 psi (206,677 kPa)

Maximum Depth

34,182 ft (10,419 m)

Products/Services

- *Revolution* rotary-steerable service
- Weatherford LWD system
- *HEL* system with *MFR*, *BAP*, *HAGR*, and *IDS* sensors