

CASE STUDY

GYROGUIDE GWD SYSTEM ENABLES SUCCESSFUL WHIPSTOCK ORIENTATIONS IN THREE WELLS, SAVING 24.5 HOURS OF RIG TIME VERSUS WIRELINE GYRO RUNS

▶ TECHNOLOGY

- GyroGuide™ gyro-while-drilling (GWD) system

▶ APPLICATION

- Directional drilling
- Whipstock orientation

▶ LOCATION

- Mexico

INDUSTRY CHALLENGE + OBJECTIVE

An operator in Mexico needed to orient their whipstocks in three wells they intended to sidetrack. The operator had previously used a wireline gyro for whipstock orientations but needed a solution that would reduce operational time, acquire real-time toolface data while rotating the whipstock, and provide improved quality control. We recommended the operator implement our GyroGuide GWD solution to address their challenges.

TECHNOLOGY + SERVICE SOLUTION

- Our GyroGuide GWD system is the proven industry leader for providing real-time wellbore guidance.
- The system collects real-time survey data at all inclinations and in any direction, thus offering safe and accurate wellbore positioning.
- The system allows highly accurate toolface orientation services to orient whipstock and real-time reactive toolface monitoring for steer/drillout operations.

RESULTS + VALUE DELIVERED

- The GWD system enabled a reduction in operating time versus a standard wireline gyro run by an average of 80% across the three wells, saving 24.5 total hours.
 - On the first well, the operator used the GWD system to successfully orient the whipstock in 3.5 hours, saving almost 75% in operational time versus the wireline gyro system (13.66 hours).
 - On the second well, the operator used the GWD system to successfully orient the whipstock in 4 hours, saving almost 69% in operational time versus the wireline gyro system (12.83 hours).
 - On the third well, the operator used the GWD system to successfully orient the whipstock in 1.6 hours, saving almost 82% in operational time versus the wireline gyro system (9 hours).
- The GWD system reduced the risk of needing to retrieve the whipstock to surface due to problems with the cable-assisted gyro probe in the UBHO during the orientation process.
- The operator mitigated operational risks by eliminating the use of cable runs.
- The operator reduced the time taken to position the whipstock by having real-time gyro toolface data on the whipstock's high side.

