

CASE STUDY

GYROGUIDE REAL-TIME GYRO SYSTEM ALLOWS OPERATOR TO SUCCESSFULLY SET BRIDGE PLUG, ORIENT WHIPSTOCK, AND KICK OFF IN PERMIAN DIRECTIONAL DRILLING PROJECT

► TECHNOLOGY

- GyroGuide™ real-time gyro system
- Ran on Gyrodata's wireline

► APPLICATION

- Directional drilling
- Whipstock orientation
- Wellbore placement

► LOCATION

- Permian Basin

INDUSTRY CHALLENGE + OBJECTIVE

An operator in the Permian basin was drilling a directional well and needed to correctly orient and geosteer it to achieve precise reservoir placement. Due to the limitations of MWD equipment in areas of magnetic interference and a desire to reduce the cost of the operation, the operator decided to implement our GyroGuide real-time gyro system.

TECHNOLOGY + SERVICE SOLUTION

- Our GyroGuide real-time gyro system provides high-accuracy wellbore placement with positional, orientation, steering, and continuous surveys.
- The system communicates to surface in real time via electric line.
- GyroGuide technology is capable of running up to 250 ft/min in continuous mode from vertical to horizontal while traversing in or out of the well, generating two independent wellbore surveys that are compared to generate a final data set.

RESULTS + VALUE DELIVERED

- We successfully helped the operator set the cast iron bridge plug, orient their whipstock, and kick off in the correct direction.
- By running a GyroGuide system, the operator eliminated the need for a third-party wireline company to mobilize and come to the site. In addition, the third-party company would typically not be able to orient or steer the well in the correct direction as we did.
- We provided accurate toolface and azimuth measurements while orienting the whipstock inside the casing, which is typically a challenge with MWD tools due to magnetic interference.
- Live inclination, toolface, and azimuth data while drilling minimized downtime associated with competitor single-shot steering systems.

