

CASE STUDY

GYROGUIDE HELPS OPERATOR ACHIEVE DIRECTIONAL OBJECTIVES IN CHALLENGING PERMIAN BASIN WELL

► TECHNOLOGY

- GyroGuide™ real-time gyrostearing system

► APPLICATION

- Directional drilling
- Gyrostearing

► LOCATION

- Permian Basin

INDUSTRY CHALLENGE + OBJECTIVE

An operator in the Permian Basin was drilling a directional well where magnetic interference from an RSS fish left in hole would have made toolface and azimuth measurements inaccurate if MWD equipment were used. As such, the operator decided to run our GyroGuide system to help accurately steer around the fish, keep the well on course, and achieve their directional objectives.

TECHNOLOGY + SERVICE SOLUTION

- The operator chose the GyroGuide system due to its ability to gyrostear in real time and provide high-accuracy wellbore placement.
- Continued advancements in gyro sensor technology ensured the system could be run in the challenging downhole environment, while onsite technical support from our survey specialist helped the operator make the right decisions to successfully achieve their objectives.

RESULTS + VALUE DELIVERED

- The operator gyrostear through the 120-ft section for approximately 3 hours.
- Throughout the section, the GyroGuide system was unaffected by magnetic interference and provided accurate toolface and azimuth measurements, helping the operator to successfully steer around the fish, correct the well path, and finish drilling with the MWD equipment.
 - Gyrostearing helped the operator get to an azimuth of 62° when the MWD tool could not be used due to magnetic interference.
- Comparing the previous survey data with our survey data revealed that at the beginning of the section, the operator was within feet of the fish. Had the operator continued drilling without implementing the GyroGuide system, they would have effectively been steering blind throughout the section, risking collision with the fish and placing the wellbore inaccurately.