

CASE STUDY

GWD70 SYSTEM ELIMINATES WIRELINE RUN, ALLOWING OPERATOR TO DRILL SECTION AHEAD OF AFE BY 5 HOURS

▶ TECHNOLOGY

- GyroGuide™ GWD70

▶ APPLICATION

- Directional drilling
- Wellbore placement

▶ LOCATION

- North Sea

INDUSTRY CHALLENGE + OBJECTIVE

An operator in the UK North Sea had previously used a competitor gyro system run on wireline to kick off their directional wells due to their gyro-while-drilling system's inability to handle vessel movement and still provide a reliable survey. To overcome this challenge, the operator ran our GyroGuide GWD70 system, which could handle more challenging conditions while ensuring survey quality and wellbore placement accuracy.

TECHNOLOGY + SERVICE SOLUTION

- Our GWD70 system provided data for advanced collision avoidance and real-time knowledge of wellbore position, enhancing performance and safety.
- The GWD70 system collects real-time survey data at an inclination up to 70° and in any direction, enabling safer operations and more accurate wellbore positioning.
- Gyro accuracy ensures precise wellbore guidance for collision avoidance, with the GWD tool providing continuous inclination and toolface from vertical while sliding and full surveys on demand.
- A 60-second Intelligent Tool Mode (IMT) sampling was used to ensure usable data was collected based on issues encountered by the previous gyro vendor.

RESULTS + VALUE DELIVERED

- One run using the GWD70 system was completed to TD of 5,245 ft in the 16-in. hole section, providing stationary gyro surveys while drilling in an RSS BHA.
- The GWD70 system was the primary source of directional control from kickoff to 2,532 ft, as the magnetic interference through this area prevented the MWD tool from providing accurate survey data.
- The GWD70 system eliminated the need for a single-shot gyro on wireline as previously done by the competitor. The section was drilled ahead of AFE, saving 15% of planned drilling time (approximately 5 hours) and \$73,000 based on the rig day rate.
- The third-party service company indicated their intent to use the system in future wells, as on previous ones it had taken hours to get a stable survey in the tophole section.

