

## CASE STUDY

# QUEST GWD REAL-TIME SURVEYS ENABLED IMPROVED WELLBORE PLACEMENT, NEGATING THE NEED FOR DROP GYRO

### ▶ TECHNOLOGY

- Quest™ gyro-while-drilling (GWD) system
- SPEAR™ solid-state sensors

### ▶ APPLICATION

- Wellbore placement
- Collision risk mitigation
- Remote operations

### ▶ LOCATION

- Norway

### INDUSTRY CHALLENGE + OBJECTIVE

A key customer in Norway needed to survey the 8 ½-in. section of a well to ensure accurate wellbore placement while mitigating the risk of wellbore collision. The operator hoped to improve rig time, while leveraging remote operations for monitoring drilling operations and survey quality verification. They were also looking to obtain real-time surveys in place of running a multishot gyro at total depth (TD) of the section. The operator had previously run our GWD70 and GWD90 systems, but given their objectives, we recommended deployment of our Quest GWD system.

## TECHNOLOGY + SERVICE SOLUTION

- We suggested implementing our Quest GWD system, powered by SPEAR solid-state sensors.
- The Quest GWD system incorporates our advanced downhole data collection with smart processing, ensuring precise and faster surveys.
- The sensors are able to handle harsher downhole environments when compared to conventional GWD systems.
- Remote operations are enabled with Quest GWD technology.

## RESULTS + VALUE DELIVERED

- The Quest GWD system was preconfigured in the third-party service company's workshop. The system was then deployed in the 8 ½-in. section with a rotary steerable assembly.
- All operations were supported remotely from the operations center in Aberdeen, with no survey specialists onboard for any contingency operations eliminating the need for a drop multishot gyro.
- During operations, 63 surveys were collected with no repeat surveys. Post-job testing confirmed that all downhole data conformed to the error model.
- As surveys were collected in real time eliminating any impact on rig time. We provided a full data set for accurate wellbore placement for the whole section, negating the need for a verification drop gyro kit.
- The improved survey times using the Quest GWD system saved approximately 3.6 hours of rig time versus previous systems. In addition, eliminating the need to rig up, take rotation shots, and rig down with the drop gyro saved another 50 minutes.

