CASE STUDY

QUEST GWD ALLOWS OPERATOR IN NORWEGIAN NORTH SEA TO SET TWELVE SURFACE CONDUCTORS WITH ONE QUEST GWD TOOL SAVING $345,000

TECHNOLOGY

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

APPLICATION

- Wellbore placement
- Collision risk mitigation
- Remote operations

LOCATION

- Norwegian North Sea

INDUSTRY CHALLENGE + OBJECTIVE

A customer in the Norwegian North Sea was looking to complete a conductor batch-drilling campaign following the installation of a new platform to add additional reserves to existing field production facilties. With any top hole batch the customer required an efficient operation, however, knowing it always involves challenging surveying conditions associated with tophole section drilling, implementation of our solid-state Quest GWD system to reduce the rig time necessary to survey the wells was proposed.

TECHNOLOGY + SERVICE SOLUTION

- Recommendation to deploy our Quest GWD system, powered by SPEAR solid-state sensors.
- The sensors have significantly lower power consumption, and able to handle harsher downhole environments when compared to conventional GWD systems.
- The shorter SPEAR sensor package, loaded into a compact collar, allows greater steerablility and sensor placement closer to the bit.
- The Quest tool can be operated in extended mode. This allows a longer sampling period for surveying, allowing the sensor to successfully survey, even while experiencing movement due to sea currents and swell.

RESULTS + VALUE DELIVERED

- Quest onshore BHA configuration enabled remote operations, removing 20 survey specialist rig days equating to a customer saving of approximately $50,000.
- SPEAR technology facilitated one BHA run for all 12 conductors, reducing BHA handling in the red zone, toolface alignment time, additional crane lifts and tool handling on the deck. This ultimately reduced time between wells for the customer, saving of $214,000 in operational costs.
- Quest GWD extended mode, significantly reduced survey time versus legacy GWD, saving the customer 3 hours in rig time at $81,000.
- Total savings from the deployment of our Quest GWD system for the customer was in the region of $345,000.

40 gyrodata YEARS OF INNOVATION