

CASE STUDY

HIRING LOCAL TALENT AND EXPEDITING TRAINING ENABLES RAPID RESPONSE TO SURVEY REQUIREMENTS FOR OPERATOR OFFSHORE THAILAND

► TECHNOLOGY

- GyroGuide™ gyro surveying system

► APPLICATION

- Wellbore collision risk mitigation
- Remote operations support and training

► LOCATION

- Offshore Thailand

INDUSTRY CHALLENGE + OBJECTIVE

An operator in a crowded field offshore Thailand needed to perform drop gyro surveys in two tophole sections to assess well separation factors, as there was a high risk of wellbore collision. The operator requested support during a critical period, which made it logistically impossible to mobilize personnel in time for the project, as ongoing COVID-19 protocols necessitated quarantining after entering the country. We developed a plan to overcome these challenges while providing the operator with the high-accuracy surveys required to mitigate the risk of wellbore collision.

TECHNOLOGY + SERVICE SOLUTION

- Our GyroGuide system in memory mode uses a rate-gyro and accelerometer sensor package in a rugged housing to withstand high-pressure and high-temperature operations.
- The system can be dropped/released or run on slickline, with up to 62 hours of survey time in memory.
- The system collects survey data during the trip out of the hole while pipe is in slips, which allows surveying from TD to surface.
- The system allows pumping and rotating while being dropped to prevent stuck pipe.

RESULTS + VALUE DELIVERED

- Considering the criticality of the job, the operations team raised a management of change request and assessed risk accordingly.
- To circumvent quarantining requirements and allow rapid deployment to the rig, we hired local Thai personnel and initiated an online training course with a senior mentor and Gyrodata virtual instructor.
- The new engineer was supported remotely from our regional office in Malaysia, with an expert providing instruction on rigging up, programming the gyro system into memory mode, dropping the system downhole, retrieving the system, and downloading all wellbore survey data.
- The two wells were batch-drilled, with all surveys completed successfully and the data provided to the operator. If gyro surveys had been unavailable, the operator would not have been able to drill the wells.
- We confirmed that the two wells were properly separated and not at risk of collision with each other or other wells in the field.
- The operator commended our efforts to rapidly respond to their needs, the hiring of local personnel for the project, and the quality of the survey data received.

