

## CASE STUDY

# GYROGUIDE GWD90™ PLACES HIGH ANGLE WELLBORE AS FIRST GWD90+RSS JOB IN GULF OF THAILAND

### ▶ TECHNOLOGY

- GyroGuide GWD90™
- Rotary Steerable System

### ▶ APPLICATION

- Offshore Drilling
- S-Shaped Well Profile
- High Angle Drilling
- Collision Avoidance
- Magnetic Interference
- Gross Error Detection

### ▶ LOCATION

- Jasmine Field  
(Gulf of Thailand)

### INDUSTRY CHALLENGE + OBJECTIVE

An international exploration and production company had planned to drill a 10,000 foot, 8½" hole section in the Jasmine Field. The Jasmine Field, located in the Gulf of Thailand, comprises multiple oil deposits embedded in thinly stacked-sand layers. Due to multiple existing wells in the area, the well plan required an S-shaped well profile with a tangent section covering over 3,700 feet at 78° inclination. This complex well plan required special consideration to magnetic interference corrupting the magnetic survey readings, as well as wellbore collision risks during drilling operations.

To minimize wellbore placement uncertainties, Gyrodata was requested to provide a real-time, high accuracy survey solution that could seamlessly integrate with an advanced RSS system in the BHA.

## TECHNOLOGY + SERVICE SOLUTION

- Gyrodata recommended running the GyroGuide GWD90 in combination with a 3rd party, Rotary Steerable System (RSS). It was crucial to source a suitable GWD collar for the GWD+RSS combination, which required coordination from both Gyrodata and the 3rd party RSS provider within a two-week time frame.
- The GyroGuide GWD90 utilizes a gyro sensor to survey in excess of 70° inclination while also running a MWD magnetic sensor simultaneously - improving survey accuracy and gross error detection. This allowed the operator to receive a more reliable, real-time measurement while drilling through the multi-well environment.

## RESULT + VALUE DELIVERED

- The GyroGuide GWD90 provided real-time surveys to a TD of 8,945 feet and 10,076 feet MD in one run.
- Additionally, the GyroGuide GWD 90 surveyed to a maximum of 78° inclination in the 3,780 feet tangent section.
- The GWD+RSS combination eliminated the need for wireline methods and, thus, delays from on-surface interruptions which resulted in faster well delivery time and reduced drilling costs.
- This job is noted as the first drilling job in Thailand to utilize the GyroGuide GWD90 run in combination with the RSS.

