

CASE STUDY

QUEST GWD ENABLES DRILLING OF SAGD PAIRED WELLS WITH 24 FT TVD SEPARATION

▶ TECHNOLOGY

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

▶ APPLICATION

- High-accuracy wellbore surveying
- Wellbore placement
- Extended reach drilling

▶ LOCATION

- Middle East

INDUSTRY CHALLENGE + OBJECTIVE

An operator in the Middle East planned to drill twin SAGD wells with surface locations more than 7,200 ft (2,200 m) apart. The first well (the injector) was drilled and completed with magnetized liner to enable passive magnetic ranging when the second well was drilled. The challenge was to drill the second well (the producer) below the primary (injector) well with a 24 ft center to center distance along 3,500 ft of lateral section.

TECHNOLOGY + SERVICE SOLUTION

- Gyrodata recommended deployment of the Quest GWD system powered by SPEAR Technology. Quest is the most accurate gyro while drilling tool on the market and can provide precise and accurate surveys at all inclinations, free of magnetic interference from the adjacent injector well and regardless of the direction in which the wells are being drilled.
- The Quest GWD system incorporates advanced downhole data collection with smart processing, ensuring the fastest surveys in the industry today.
- The Quest GWD system was deployed in integration with LWD tools and RSS while drilling the 8 ½" lateral section of the producer well.

RESULTS + VALUE DELIVERED

- The producer well was successfully placed within the desired 24 ft TVD separation from the injector well for 3500 ft of lateral section.
- A total of 79 Quest GWD surveys were recorded during the drilling process which confirmed the positional accuracy of the producer well.
- The twin SAGD wells were completed successfully and as planned, avoiding costly remediation.
- The customer was very pleased with the execution of the planned wells and expressed a desire to utilize the same services for similar, future operations.

