

CASE STUDY

OMEGA^X VERIFIES AREAS OF DOGLEG SEVERITY IN OFFSHORE WELL, ALLOWING OPERATOR TO SUCCESSFULLY RUN CASING AND ELIMINATING 12 HOURS OF RIG TIME

► TECHNOLOGY

- Omega^X™ solid-state drop gyro system

► APPLICATION

- Casing evaluation
- Casing wear mitigation

► LOCATION

- Gulf of Mexico

INDUSTRY CHALLENGE + OBJECTIVE

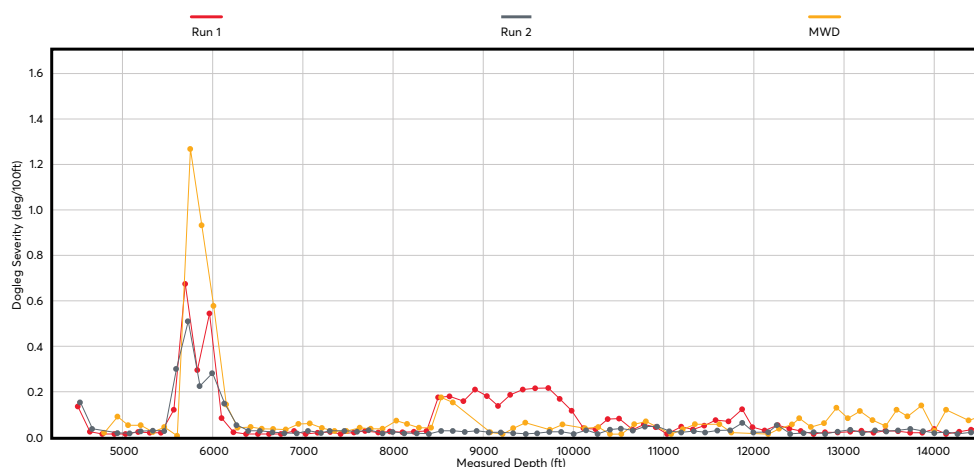
- An operator in the Gulf of Mexico drilled a well and experienced an unexpected spike in dogleg severity at 5,740 ft. The operator needed to verify the dogleg, as well as several anomalies in the MWD data, before proceeding with running casing. To obtain highly accurate information on the wellbore in a cost-efficient manner, the operator decided to run our Omega^X drop gyro surveying system.

TECHNOLOGY + SERVICE SOLUTION

- The Omega^X system was chosen for its ability to provide more accurate wellbore information and improved reliability versus previous solutions.
- The Omega^X system eliminates a significant amount of survey time versus an equivalent wireline run.
- The Omega^X system's dual sensor probes allow two surveys across the same area, improving data integrity and providing better wellbore representation.
- Extremely fast data acquisition, efficient power usage, and increased reliability allow maximum flexibility to survey during various stages of wellbore construction and production.

RESULTS + VALUE DELIVERED

- After running our Omega^X system the first time, the operator was able to verify the original area of concern where increased dogleg severity could cause problems, as well as another area where the MWD tool had failed to identify dogleg severity due to missing data points.
- Having this information allowed the operator to take proper remedial action, which included reaming the section to smooth the dogleg, before running casing.
- On the second Omega^X run, the operator used the system to verify that their remedial actions were effective in eliminating the problem.



- The system helped the operator understand where the drillpipe centralizers should be placed to reduce casing wear/fatigue, eliminating future need to return to the section to patch up holes in the casing.

- The Omega^X system eliminated the need for a comparable gyro run on wireline, saving at least 12 hours of rig time.

The Omega^X system verified that the original spike in dogleg severity was at 5,740 ft. In addition, the Omega^X system revealed an additional area of slightly elevated dogleg severity from approximately 8,500 to 10,000 ft that wasn't originally visible due to missing MWD data.