

CASE STUDY

OMEGA DROP GYRO SYSTEM SUCCESSFULLY SURVEYS DEEP EXPLORATION WELL DESPITE FLOW CHALLENGES, SAVING 24 HOURS OF RIG TIME

▶ TECHNOLOGY

- Omega™ drop gyro system

▶ APPLICATION

- Wellbore placement

▶ LOCATION

- Middle East

INDUSTRY CHALLENGE + OBJECTIVE

An operator in the Middle East was drilling a deep exploration well and needed high-accuracy survey data to ensure correct wellbore placement. The TD of the well was approximately 15,900 ft, with an openhole section of 4,600 ft. In addition to the challenges inherent in drilling the well, the operator also expected an area of high temperature at TD. Taking these considerations into account, the operator requested a solution that could withstand the high temperature while returning an accurate survey prior to running casing.

TECHNOLOGY + SERVICE SOLUTION

- The Omega system is packaged as a service offering involving an innovative drop gyro and the necessary field and support staff to ensure correct system running and functionality and post-run data analysis.
- The Omega system eliminates a significant amount of survey time versus an equivalent wireline run.
- 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

- The Omega system was dropped in the 8³/₈-in. hole section, but the well started flowing shortly thereafter. This required a total of 129 hours to control the well flow to get the Omega system to surface. Despite this challenge, we successfully recorded the full survey for the operator. This would not have been possible with a conventional gyro tool due to battery and memory limitations.
- Running the Omega system eliminated the need for a separate dedicated gyro run while providing the operator with critical wellbore information before they ran casing.
- Total rig time savings achieved by using the Omega system were approximately 24 hours.

