

CASE STUDY

OMEGA^X™ PROVIDES MISSING MWD SURVEYS AND REDUCES ELLIPSE OF UNCERTAINTY BY 83% IN UTICA

▶ TECHNOLOGY

- Omega^X

▶ APPLICATION

- Lateral Section Drilling

▶ LOCATION

- Utica Shale

INDUSTRY CHALLENGE + OBJECTIVE

While drilling an extended lateral section on a North American land rig, an operator detected issues with the MWD equipment while drilling the 8½-in. hole section to approximately 25,724-ft MD. The operator drilled the wellbore to TD, but there were approximately 900 ft of missing survey data. Due to the operator's concerns about hole conditions, we advised that they run our Omega^X system in combination with a cement bond log (CBL) and caliper wireline logs.

TECHNOLOGY + SERVICE SOLUTION

- Powered by our SPEAR™ solid-state gyro technology, the Omega^X system was chosen for its ability to provide more accurate wellbore placement and improved reliability versus previous solutions.
- The Omega^X system was able to be run in combination with a CBL and caliper wireline logs. As the system did not require a wireline run, the operator saved approximately 16 hours of rig time, including rig-up and rig-down.

RESULT + VALUE DELIVERED

- Using the Omega^X system in combination with a CBL and caliper wireline logs eliminated the need for an independent wireline run and the risk of LIH due to hole conditions. In addition, using the system reduced the ellipse of uncertainty by 83%, placing the well 254-ft to the left and at a 16-ft shallower TVD than that measured by the MWD equipment. The Omega^X system revealed that the wellbore had not been placed accurately as noted in the original surveys, reinforcing the value of solid-state gyros in this application.

ELLIPSE OF UNCERTAINTY COMPARISON

Gyrodata Omega^X vs MWD Survey

