CASE STUDY

OMEGA^{X}™ PROVIDES SURVEYS MISSED BY FAILED MWD, AVOIDING A 36-HOUR ROUND TRIP

TECHNOLOGY

– Omega^{X} powered by SPEAR

APPLICATION

– Extended Reach Well Surveying

LOCATION

– Utica Shale (Ohio, USA)

INDUSTRY CHALLENGE + OBJECTIVE

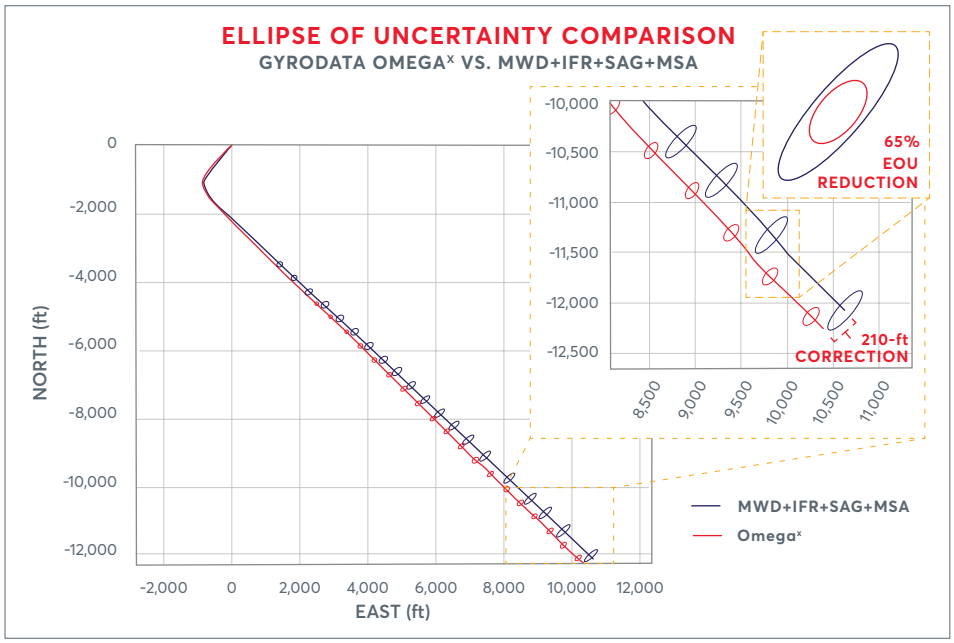
A major operator drilled a three-mile, horizontal well in a south-east direction in the Utica Shale. The operator utilized conventional measurements-while-drilling (MWD) surveys combined with in-field referencing (IFR), BHA Sag , and multistation analysis (MSA) corrections. The MWD tool intermittently failed to provide surveys over the last 4,000 feet of the wellbore. Due to the missing and invalid MWD surveys, the operator required a solution to resurvey the well with the least amount of downtime impacting the project.

TECHNOLOGY + SERVICE SOLUTION

- Gyrodata recommended running its solid-state memory gyro surveying system, Omega^{X}, in combination with third-party cement bond (CBL) and casing collar (CCL) logging tools on wireline while logging out of the hole on a single trip.
- Omega^{X} operated without using any additional rig time while logging out of the hole from a total depth (TD) of 25,634 feet - providing high-accuracy, high-speed surveys every 32 seconds.

RESULTS + VALUE DELIVERED

- Following the run, Gyrodata made the following discoveries: Omega^{X} significantly improved the wellbore's ellipse of uncertainty (EOU) by 151%, accurately corrected the bottomhole location by 210 feet, and identified a 0.92 declination error. These findings prove that there is more drillable space for future wells than previously estimated.
- Omega^{X} successfully provided the missing surveys to a TD of 25,634 feet during the planned logging run, **saving the operator 36 hours of rig time** to replace the failed MWD tool.



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