

Optimize High Density Field Development

OPERATOR OBJECTIVE

Maximize acreage value through reduction in well-to-well spacing.

OBSTACLE

Anti-Collision (A/C) risk was determined to compromise safe operations when drilling at reduced well-to-well spacing. Upon evaluation, the Ellipse of Uncertainty (EOU) size was determined to be the primary driver in the elevated A/C risk calculation.

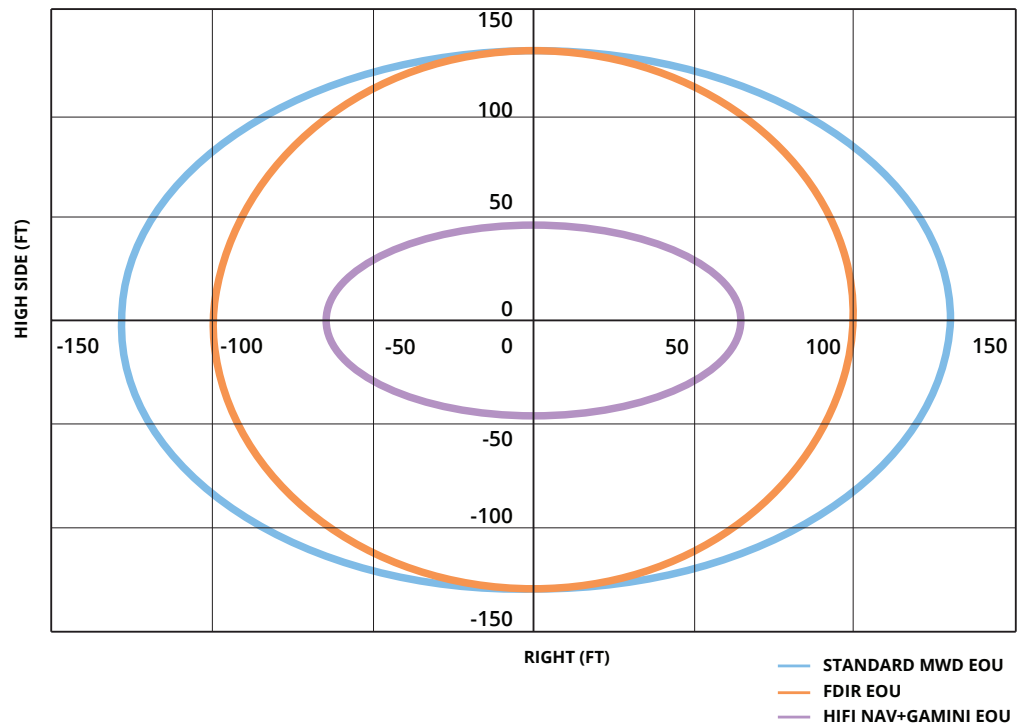
SOLUTION

HiFi Nav* + Gemini* was deployed to reduce EOU size and allow the operator to safely drill wells at a tighter well-to-well spacing.

RESULTS

When comparing to standard MWD surveying, HiFi Nav+Gemini yielding a reduction in the EOU size by 50% laterally and 64% vertically!

ELLIPSE OF UNCERTAINTY AT FINAL SURVEY STATION EXCLUDING GLOBAL DECLINATION UNCERTAINTY (3 STD. DEV.)



INDUSTRY-LEADING UNCERTAINTY REDUCTION
WITH HIFI NAV+GEMINI ENABLES OPERATORS TO
MAXIMIZE ACREAGE VALUE BY DRILLING MORE WELLS
ON THE PAD AND EXTENDING LATERAL LENGTH

*HiFi Nav: is our new algorithm that uses all available data (not just MWD surveys and pseudo surveys) to calculate a significantly more accurate wellbore shape and trajectory. To do this, we use the standard MWD surveys and sliding toolface at a minimum to calculate wellbore trajectory points every 15' in your wellbore. The more accurate calculation of Motor BUR, Rotating Drop rate, and walk rate in real-time can help a DD drill smoother wellbores.

*Gemini: Noralis' latest product evolution, a multi probe system with a communication network between distributed sensor arrays. A network of over 50 sensors provides wellbore defining variables such as real time build rate, walk rate, tortuosity and gross error detection.