CASE HISTORY

MagTraC MWD RANGING™- STEERS CLIENT AWAY FROM COLLISION RISK

APPLICATION

Collision Avoidance and In-Fill Well

TECHNOLOGY

MagTraC MWD Ranging™

LOCATION

Norway

CUSTOMER CHALLENGE

Because of the viscous properties of the oil in this field, it is necessary to drill in-fill horizontal wells in very close proximity to older producing horizontal wells. The customer previously experienced unexpected near collision issues on two similar wells previously drilled.

SCIENTIFIC SOLUTION

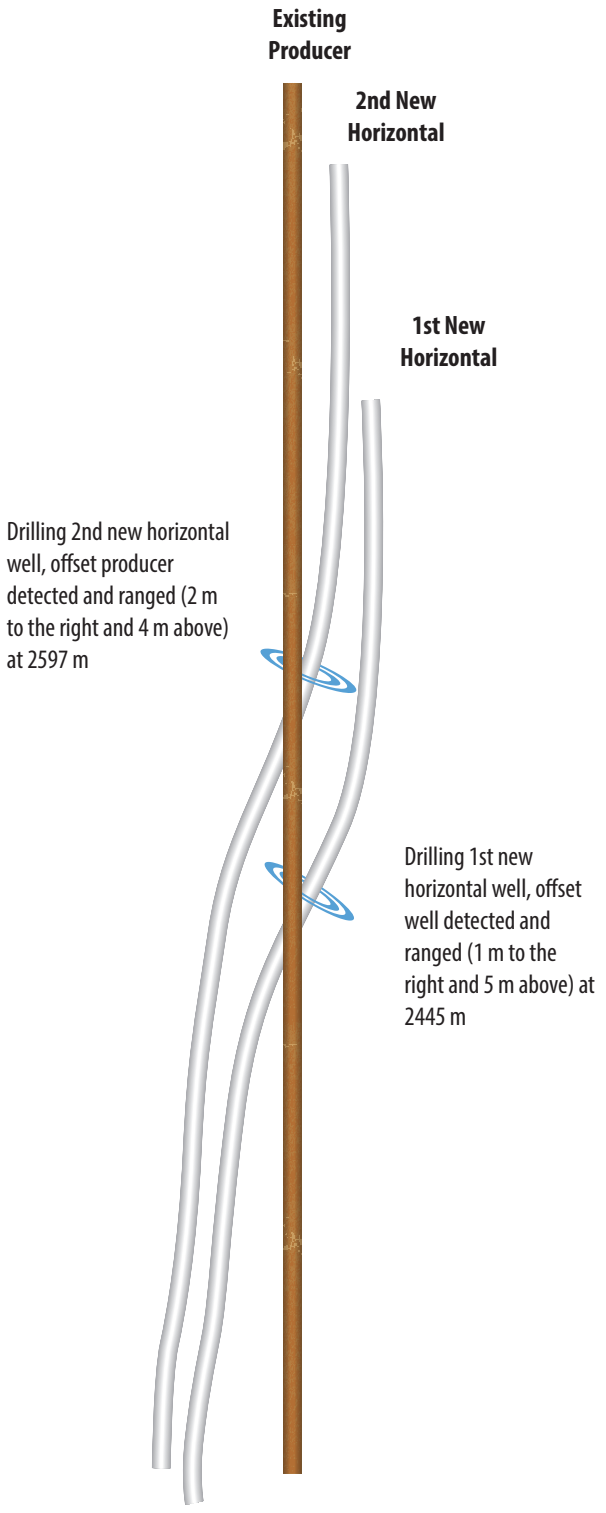
MagTraC MWD Ranging™ was used to detect and range to nearby wells enabling appropriate directional drilling decisions. MagTraC monitoring began after drilling out below the 9-5/8" liner shoe, with 3rd party MWD surveys taken every 15 m. Each raw MWD survey data set was transmitted to the SDI Data Center for analysis and response, allowing the customer to drill ahead. At the depth where the separation factor (SF) reduced to less than 1.0, the survey interval was reduced to 5 m.

All data used for ranging was within QA limits. Survey QA only failed when the MWD sensor was directly below the offset well, *after* MagTraC determined the relative well position. When slightly elevated levels of interference were detected, the ranging process commenced using 2 m spaced surveys across the area of interest.

CUSTOMER VALUE

MagTraC MWD Ranging™ service provided near real-time anti-collision monitoring and relative positioning of two new-drill horizontal wellbores that passed in close proximity to an existing horizontal producer.

All data (3rd party MWD system) was analyzed remotely eliminating the requirement for SDI personnel on location. MagTraC MWD Ranging™ detected the offset well prior to any "alert" from MWD survey QA. Early detection of the offset producer mitigated the collision risks.



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