

EmbaMunaiGas Optimizes Well Trajectory Using Multilayer Bed Boundary Detection Service

PeriScope HD service places horizontal wellbore within target interval, Kazakhstan

EmbaMunaiGas used PeriScope HD* multilayer bed boundary detection service to understand structural behavior and optimize trajectory in a horizontal well in Kazakhstan.

EmbaMunaiGas's goal: place wellbore closer to bottom of target interval

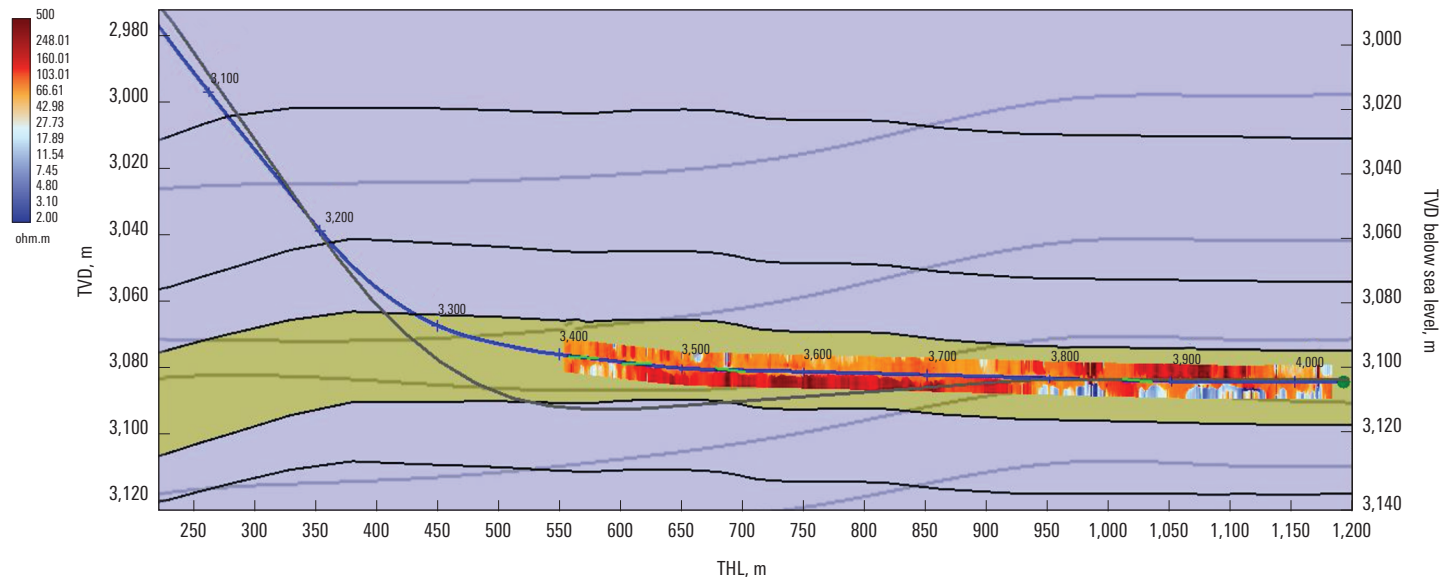
In a horizontal section in Kazakhstan, EmbaMunaiGas wanted to place the wellbore closer to the bottom of the target interval with better reservoir properties and avoid an exit through the bottom of the reservoir. A nearby fault caused considerable structural uncertainty. Based on offset wells, thickness of the target interval varied with the formation. The upper part of the reservoir had the possibility of free gas, contributing to the placement objectives. EmbaMunaiGas also wanted to avoid excess maneuvering to keep the wellbore smooth and ensure smooth completions.

Schlumberger solution: enable advanced well placement

PeriScope HD service detects multiple formation layers and fluid boundary positions, enabling advanced well placement in challenging wells in clastic and carbonate fields. The combination of inversion models with additional azimuthal measurements provides precise delineation of reservoir layers and formation evaluation while drilling.

Result: EmbaMunaiGas placed the horizontal wellbore within the target interval

PeriScope HD service and adnVISION* azimuthal density neutron service provided information on structural dips, enabling wellbore placement by mapping the hydrocarbon-bearing layer boundaries and confirming the layer qualities by applying real-time petrophysics. As a result, the wellbore was kept away from the low-resistivity layer with poor reservoir properties below, potential gas zone above, and by avoiding extra maneuvers.



PeriScope HD service provided structural understanding of a horizontal well in Kazakhstan.

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