

Quick and Seamless Transition to Digitally Connected Operations Enables New Drilling Record

Performance Live service helps sustain operations while improving drilling efficiency

Performance Live* digitally connected service enabled quick and seamless implementation while sustaining high service quality in a complex directional drilling environment with narrow geosteering windows. The operating model was crucial in helping an operator restart activities after the COVID-19 travel and operations restrictions, enabling reduced personnel rotations by 25%, lowering HSE risks, logistics, and associated carbon footprints. Additionally, the service enabled a new drilling record of 5.23 days for wells longer than 5,000-ft MD in the Rubiales Field without any service quality or HSE incidents.

Restore safe operations

Operations ceased at the end of March 2020 due to the COVID-19 pandemic. It was essential to restart activities to restore production without exposing rig personnel. Of concern was the Rubiales Field, which recorded high ROP but with narrow landing and geosteering windows within complex environments.

Enable live, offsite control of wellsite operations

Performance Live digitally connected service was presented to the operator as an immediate solution to reduce exposure of personnel at the rig site. The collaborative digital ecosystem enables a seamless transition to a new operating model that significantly lowers HSE risks while more consistently performing activities such as measurements, directional drilling, and well placement. Performance Live service was deployed among separate fields with different crew models as needed, enabling a crucial reduction on wellsite head counts, mobilizations, and exposure of personnel to COVID-19. Additionally, the Performance Live service would provide easy transition for continued use of the PeriScope HD* multilayer bed boundary detection service, a crucial element in geosteering and landing complicated 3D horizontal wells in specific fields and uninterrupted guidance from the offsite well placement team.

Sustained operations and production while improving drilling efficiency

The scalability of Performance Live service enabled implementation within a few weeks. Service quality was sustained while delivering real-time data and geosteering. The operator experienced a seamless transition from full crew at rig sites to Performance Live service, reducing personnel rotations by 25%, directly contributing to fewer HSE risks while lowering carbon footprint from 25% reduction in transportation-related emissions. Operations engineers remotely performed an average of 45 shifts each month. In the Rubiales Field, Performance Live service enabled setting a new field drilling record of 5.23 days for wells longer than 5,000-ft MD without any service quality or HSE incidents.

