PTTEP Thailand Reduces Rig-Crew Footprint to Overcome Pandemic Challenges While Maintaining Improved ROP

Performance Live service helps improve COVID-related prevention measures by decreasing the exposure for rig personnel while maintaining exceptional performance through improved ROP.

PTT Exploration and Production Plc., Ltd (PTTEP), the national oil company of Thailand with fast-growing drilling operations, successfully implemented Performance Live* digitally connected service on four rigs to continuously reduce the wellsite footprint by 50% for directional drilling operations. Results were not only about crew reduction but also sustaining ROP gains compared with previous drilling campaigns, and consistently achieving more than 1,500 ft/d.

Sustain operations despite tightening travel restrictions
COVID-19 raised immediate concerns over crew safety—how to maintain social distancing and sustain virus-related HSE standards. Restricted tool and crew movements amid international and domestic travel restrictions further hindered operations among four land rigs located between open farmlands and mountainous topography.

Rotate crews to ensure adequate quarantine time
Early steps included a mandatory quarantine process without change or reduction in rig crew sizes, which demanded more personnel to ensure fully staffed crews. Using drilling and measurement tools and services in traditional workflows added to travel, requiring trips from base to wellsite. The growing pandemic suddenly demanded new strategies as travel bans broke personnel and supply logistics.

Implement digitally connected ecosystem
Schlumberger recommended PTTEP use Performance Live digitally connected service, which decouples analytical and manual tasks and enables the former to be conducted anywhere in the world through robust and advanced connectivity and software. This service would reduce PTTEP’s wellsite crew sizes and enable performing the majority of analytical tasks from an office environment.

After a briefing about processes and workflows, PTTEP implemented a shadow phase to demonstrate team capability and technology, including a full crew on one rig but only two people actively working, one per shift, to carry out offsite operations. Performance Live service proved its viability, leading to full, four-rig implementation.

Achieved consistently high ROP while reducing rig-crew footprint
PTTEP engaged Performance Live service and reduced four wellsite-crew footprints by 50%, enabling better social distancing and sustaining other COVID-related HSE standards rig personnel. Upgraded and optimized BHA tools with digitally connected capability resulted in a 68% sustained tool rerun percentage. Additionally, Performance Live service helped PTTEP achieve an impressive 1,500 ft/d while contributing to sustained ROP gain as compared with results in previous years.

“I’m glad to see this milestone and congratulations to you all for being part of this. This couldn’t be achieved without your effort and suggestion to close on gaps during implementation. Thank you again and be safe.”

Meth Follett
Drilling Manager
PTTEP Onshore Drilling Operations