ABERDEEN DRILLING INTERNATIONAL & RELYON NUTEC PROVIDE MULITPLE DRILL-WELL-ON-SIMULATOR (DWOS) SESSIONS WITH 3RD PARTY AI-BASED WELLBORE DATA SYSTEM INTEGRATION FOR UPCOMING EXTENDED REACH DRILLING (ERD) OPERATIONS.

Case Study

Client: Operator

Location: Stavanger, Norway

Challenge: In preparation to drill a number of Extended Reach (ERD) wells, the Client requested multiple bespoke DWOS sessions using digitally twinned sub-surface wells, integrated with 3rd party AI well monitoring systems, to enhance their existing blended learning programme.

Solution: With RelyOn Nutec Simulation Technologies and our full-size ADS4-Drill simulator, we were able to train the rig crews on an exact digital twin of the planned ERD well, while simultaneously familiarising the team with the 3rd party AI well monitoring software system they would be using offshore.

"Both our leaders and crews experienced great value with the 'on-the-job' learning in a realistic simulated environment."
DRILLING SUPERVISOR

Background

Our Client is a Norway-focused Operator with a number of new discoveries and producing assets in the North Sea. With a long track record of adding value through the deployment of new drilling technology and new methods to drive continual improvement, our Client wanted to implement AI well monitoring as part of their complex ERD operations.

Having recently contracted two rigs, the Client wanted to train new crews in its drilling management control procedures and processes, with particular attention to the innovative AI wellbore technology adopted to help ensure the success of its ERD wells.

Solution

As a trusted partner with a history of delivering realistic, immersive simulation training to the Client, we understood their objectives and resonated with their training ethos from the outset. We were able to prepare and deliver a bespoke solution that combined the practical simulations with virtual workshops in order to prepare the rig crews for AI-assisted ERD operations. Our ability to realistically integrate 3rd party systems into our advanced ADS4-Drill simulator brought unique value to this truly bespoke blended solution.

Our dynamic and immersive simulator allowed the rig crews to rehearse and develop detailed operational plans and procedures for their complex ERD operations in a safe and controlled environment, using digital twins of their planned wells. The integration of the AI-based wellbore technology provided predicative analysis on the cuttings bed transport in the extended reach sections, helping the crews to ensure optimal hole cleaning during the simulated ERD well operation.

Outcome

Over a 6-week period, we delivered back-to-back training for all 12 crews from the 2 contracted rigs. This DWOS training with integrated 3rd party systems allowed the rig crews to test and hone their technical knowledge and non-technical Well Operations Crew Resource Management. The programme meant the crews were fully prepared and familiar with the procedures and systems in place for the forthcoming operations. After safely rehearsing complex operations in a simulated environment, they left with new-found confidence in their ability to efficiently manage hole cleaning in the extended reach wells allowing optimal performance.

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