

TuffTRAC Tractor Reverse Tractors 3,850 ft To Retrieve Perforating String, North Sea

Directly applying overpull at the gun string avoids costly fishing for CNR International when the cable's maximum safe working load is reached

CHALLENGE

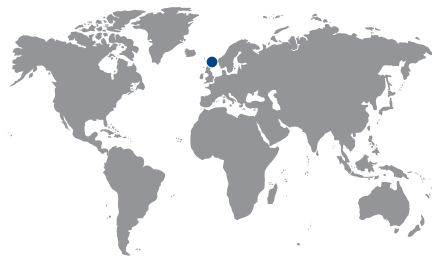
Conduct selective perforating intervention on wireline—which turned into a recovery operation when the safe working load (SWL) limit of the cable was reached before accurate correlation could be achieved.

SOLUTION

Convey the perforating toolstring on the TuffTRAC* cased hole services tractor with reverse tracting and active traction control for efficient maneuverability deploying and retrieving in the high-angle well.

RESULTS

Avoided a fishing operation by using the TuffTRAC tractor's bidirectional capability to reverse tractor 3,850 ft for retrieval of the perforating toolstring.



Adverse well conditions for perforating

Despite extensive job planning and tension simulations, high, erratic tension occurred during a North Sea perforating intervention on tracted wireline. In addition, reliable correlation could not be achieved in the intervals of interest. CNR International (UK) Limited decided to retrieve the toolstring, but could not use the cable because the 7,720-lbf limit for the SWL had been reached.

Powerful reverse tracting capability

The simple, robust TuffTRAC cased hole services tractor brings reverse tracting to high-angle and horizontal wells along with active traction control to continuously control the radial force applied by the tractor arms. With low sensitivity to wellbore conditions, the TuffTRAC tractor is ideal for any cased hole service, including perforating and intervention operations. Its electromechanical drive system optimizes the consumption of available surface power, achieving more than 45% conversion efficiency from the supplied electrical power to mechanical tracting force. The resulting lower power requirements do not stress auxiliary systems and the tractor does not have to be stopped to cool down, even during long, continuous deployments.

Successful recovery by TuffTRAC tractor

Because the TuffTRAC cased hole services tractor incorporates reverse tracting capability, it did not have to be reconfigured to reverse tractor the perforating string from the well. The tractor directly applied overpull to the gun string to avoid the safety and operational risks of exceeding the SWL of the cable. A total of 3,850 ft of reverse tracting to successfully retrieve the perforating toolstring was performed over three runs because of the adverse well conditions.



Only the simple, robust TuffTRAC cased hole services tractor employs continuous active traction control for the radial force applied by the tractor arms.