Case study: Norway

Diagnostic and perforation conveyance operation executed with significant time savings

Our customer was preparing to bring a new production well on line. The well was highly deviated, completed using ball drop activated multistage frac sleeves and Side Pocket Mandrels. In order to pump down the ball, open the sleeves and commence the stimulation phase it was required first to perforate the toe.
The customer also wanted a record of the Pressure and Temperature in the well before perforation.

Solution

Our team recommended the e-line deployed electro hydraulic **PowerTrac PRIME Tractor**. This offered material operational time savings due to its market leading tractor conveyance speeds and intelligent in-well speed/force optimization capabilities. Furthermore, the completion design required tandem tractors to be deployed to ensure successful navigation across the side pocket mandrels. The inherent tandem capability of this tractor technology enabled by its in-well drive section control meant that a single tractor could be deployed to get the job done.

Results

The **PowerTrac PRIME Tractor** was used for both runs. The tractor conveyed the production logging tools and the perforation guns successfully over a cumulative distance of 7814ft (2,382m), reaching a maximum tractor speed of 118ft/min (36m/min) with an average of 96ft/min (29.5m/min). These increased speeds resulted in a considerable reduction of tractor conveyance time of 55% when compared to conveyance speeds of conventional tractor technology.

Challenges

- Our customer was preparing to bring a new production well on line
- The well was highly deviated, completed using ball drop activated multistage frac sleeves and side pocket mandrels
- In order to pump down the ball, open the sleeves and commence the stimulation phase, it was required first to perforate the toe
- The customer also wanted a record of the pressure and temperature in the well before perforation

Results

- PowerTrac PRIME Tractor was used for both runs – conveying the production logging tools and the perforation guns successfully over a cumulative distance of 7814ft (2,382m)
- High tractor speeds achieved – maximum tractor speed of 118ft/min (36m/min) with an average of 96ft/min (29.5m/min)
- The increased speeds resulted in a considerable reduction of tractor conveyance time of 55% when compared to conveyance speeds of conventional tractor technology