CASE STUDY- 2021- NORTH SEA

First SUMO® Casing Jack System Run to Free 317 m of 9 56" Casing from Settled Solids

Challenge

Equinor needed retrieve a total of 1120 m of $9\,\%$ " casing to allow for a whipstock to be set at 1477 m depth to perform a side-track in the 13 %" casing. Particularly the lower part of the $9\,\%$ " casing is difficult to retrieve due to the solids in the mud settling out and creating very high resistance. Several factors are limiting the maximum amount of pull applied to the fish and the main restriction in this application was the 5" drillpipe tensile rating of 253 MT.

Pulling casing from settled solids



Solution

The Archer SAMURAI® Pipe Cutter was run dormant in the string while placing a cement plug to be dressed and tagged and then followed by 5 strategically planned cuts –all in the same run. A variety of time efficient solutions were used to retrieve the 9 %" casing down to the 317 m piece stuck in solids. For this run the SUMO® Casing Jack System was selected to hydraulically jack the piece free.

SUMO® with 800 MT Pulling Capacity

Result

The SUMO® Casing Jack System was run in hole and engaged in the top of the remaining $9\,\%$ " casing. A straight overpull of 286 MT was applied to verify if the fish would come free. Subsequently the SUMO® Anchor was activated to engage inside the $13\,\%$ " casing and static pressure was applied to the Pull Section to develop $455\,$ MT of force directly on the fish. 12 cycles of 1.2 m stroke each were performed over 3 hrs to jack the piece free.

317 m casing fish jacked free



