

CASE STUDY- 2020-NORTH SEA

LOCK & LOAD® System Saves Major Operator 14 hours of rig time

Challenge

A major operator on the Norwegian Continental Shelf planned to install a LASTLOCK® followed by cementing and dressing & tagging of the plug for verification. This was to be done inside a 9 5/8" casing at 5,675mMD with 80 degrees inclination. With an average tripping speed of 800m/hr every round-trip was estimated to take 14 hours between subsequent operations that cannot be combined within the same trip.

“Successfully scraped, set bridge plug, cemented, dressed and tagged plug in one run”

Solution

Archer has developed a new system with a customized cementing stinger and incorporated drilling blades on the running tool for the bridge plug. A multi-combo BHA was prepared including a scraper to clean the setting area and a LASTLOCK® bridge plug with new LOCK & LOAD® running tool. The BHA was planned to be hung-off in the wellhead after cementing while nipping the BOP instead of pulling out. After nipping the plug can be dressed and tagged.

5,675 mMD and 80° inclination



Result

The LOCK & LOAD® system was successfully deployed achieving all planned objectives in one run. The cement was confirmed to be firm with the required integrity and the operator effectively saved a full round-trip of 14 hours along with a reduction of work in the red zone.

14 hours saved by using LOCK & LOAD®

