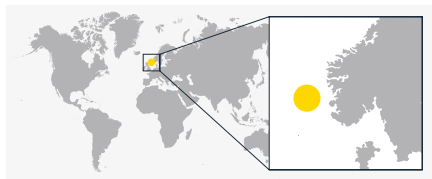


Oil Based Mud (OBM) Successfully Removed With Claxton's SWAT™ and Archer's TCP Guns



Region: UK North Sea

Customer: Claxton on behalf of major operator

Well Type: Subsea

Case Benefits

- Successful pre-job planning to integrate
- Archer's tubing conveyed perforation (TCP) and Claxton's SWAT.
- Successfully perforated 9-5/8" without damaging 13-3/8" for OBM removal.
- Client's operational objectives fully achieved.

Key Capabilities

- Archer able to meet well abandonment requirements for Category 2.1 and 2.2 wells.
- TCP charges tweaked specific to well scenario.
- Specific tooling designed and produced to incorporate Archer TCP with Claxton SWAT.

Typical Applications

- Well abandonment
- Environmental plug
- OBM removal

Challenge

Claxton Engineering approached Archer to provide a **Tubing Conveyed Perforation (TCP)** solution to be integrated with their **Suspended Well Abandonment Tool (SWAT)** to allow them to perforate a casing in Category 2.1 and 2.2 wells for well abandonment scenarios.

The challenge involved designing and manufacturing niche tooling and firing head options to enable the standard TCP guns to be used in the SWAT housing, and to be hung off below the SWAT and functioning, using an external hydraulic line. Additional testing was carried out to select and design charges for both 2-1/8" and 7" TCP guns.

Solution

Archer carried out several system tests to select and design charges for the application, to ensure all scenarios were covered as well as providing a TCP solution fully integrated with the SWAT Tool. The project was internally planned and executed, which resulted in a successful outcome for both Archer and the customer.

Result

The customer successfully achieved their objectives, as Archer successfully perforated 9-5/8" 47# and 53.5# without any damage to the 13-3/8" 72# casing using 2-1/8" and 7" TCP guns. This allowed for the removal of the OBM behind the 9-5/8" casing prior to circulating cement into the annulus for abandonment purposes.