Archer's Plug and Perforate System Helps Operator Qualify an Annular Barrier



Region: North Sea **Customer:** Major operator

Case benefits

- Saves time
- Saves costs
- Efficient plug setting with no need for weight
- Retrievable plug
- Qualifies a formation barrier

Key capabilities

- ISO 14310 certified plug
- Field proven
- Can be set and retrieved multiple times
- Perforation gun that only penetrates single casing

Typical Applications

- Plug & Abandonment
- Slot recovery
- Seal of annulus pressure
- Stuck casing with no circulation through the shoe

Challenge

A major operator was looking to qualify a "Green Clay" formation to be used as an annular barrier.

Solution

The solution was the Archer Plug and Perforate system, which is built on the SPARTAN plug and Tubing Conveyed Perforation (TCP).



To verify the formation, the SPARTAN plug and TCP BHA guns were placed in the Green Clay section of the well. The TCP guns were then fired.

The SPARTAN plug was set and a leak off test against the Green Clay was performed. The leak off test was successful and the annular barrier was proved.

The final step of the operation was to cement the inside of the casing through the SPARTAN to complete the barrier.

Result

The cement job was flawlessly executed and the formation was qualified as a barrier.

