

VESSEL BASED RIGLESS WELL DECOMMISSIONING

Bespoke Designed 7" SWAT™ for Rigless Well Abandonment



Claxton were contracted by EXCEED Energy to abandon five wells in the North Sea. Claxton were awarded both phases of the well abandonment scope. The first phase involved plugging the wells to prevent environmental harm. In the second phase, a solution was devised and implemented for wellhead severance and recovery.

THE CHALLENGE

One of the five wells had a 7" x 32 lb/ft casing. The standard configuration of SWAT which operates in casing sizes 9 5/8" through to 13 3/8" could not be used to place the environmental plug in this well.

The well therefore required a specially designed compact 7" SWAT to be used. However, due to a restricted back deck, it also needed to have a smaller footprint but maintain the same functionality and interface as the larger 9 5/8" SWAT that was being used for the other wells.

Supplying a well abandonment tool to perforate, circulate out oil-based mud and place an environmental cement plug across two annuli within the drift diameter of 5.969" (151.6mm) was going to push tolerances.

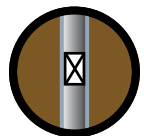
CUSTOMER GOAL

The goal was to abandon the five wells in the two oil fields while reducing project costs and carbon footprint as well as minimising the environmental impact.

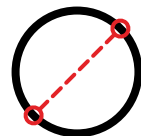
OUR SOLUTION AND ITS COMMERCIAL BENEFITS TO THE PROJECT

- SWAT was used to perforate the well annuli, recover oil-based mud and place environmental cement plugs in three of the five wells.
- The multi-string severance tooling combined with the wellhead picker was used to sever wellheads >10 ft below the mudline and recover the well stumps to the vessel.
- A new SWAT was designed, procured, manufactured, assembled, and tested for use inside a 7" x 32 lb/ft well casing.
- Claxton worked with Probe, another brand in Acteon's cutting and decommissioning segment, for manufacturing the new SWAT.

The Project in Numbers



3 Wells perforated, oil-based mud recovered & plugged



SWAT Casing range from 7" up to 13 3/8"



5 Subsea Wellheads Cut & Recovered



SWAT spread on vessel back deck



Recovered single & multi-string wellheads