

A BESPOKE RIGLESS CUTTING AND RECOVERY SOLUTION USING SABRE™

Claxton utilized a jack-up lift barge to provide a full cutting and recovery solution for a client across two platforms with a total of seven wells, along with an additional subsea suspended well at one of the locations.

THE PROBLEM

As part of their wider decommissioning programme in the Southern North Sea, an operator called on Claxton to abandon seven platform wells, plus one abandoned tieback well, across two of their platforms.

This was a challenge for which Claxton was ideally qualified, given the track record of successful decommissioning campaigns in the North Sea over the past 23 years. This was the perfect opportunity for Claxton to deploy the subsea abrasive cutting system, SABRE™, as the Head of Decommissioning, Matt Marcantonio explained; “SABRE uses a mixture of air, water and abrasive garnet at up to 1,000 bar to cut through the multiple steel casings and any cement within the various annuli. The platforms both had complex requirements which meant we had to develop tooling and equipment specifically for the project.”

The client agreed that combined tubing recovery operations, based on a dual recovery operation between the platforms and a jack-up lift barge, would be the best approach due to limited deck space. This also removed the need for a drilling rig. Claxton’s experience has proven that this is a great way to decommission the smaller ageing platforms in the North Sea. Over the years Claxton has built up a large array of relevant tooling that sets us apart from our competitors in this method of decommissioning.

THE SOLUTION

There was a requirement for a lightweight recovery deck to allow the team to skid across all six well slots on one platform and both well slots on the other. This technique provides a work platform and load-bearing structure which is used to react against during recovery operations.

With no known industry equivalents, the design and development of this piece of equipment was a significant initiative for both the project and Claxton. Other bespoke equipment designed and supplied by Claxton for this campaign included a blowout preventer (BOP) platform which created a suitable working area to install and tie back a power tong plus a catch tool to recover 30in stumps.

Once fully equipped and offshore, the team began the campaign on the first platform. Operations commenced with the removal of the four Xmas trees, followed by the installation of the lightweight recovery deck. The tubing from the multi-string wells was then recovered to make way for the SABRE abrasive cutting equipment for the down-hole cutting phase.

The team overcame the challenge of the 30in conductor only having a short stump protruding from the seabed and not being cemented to the 20in which came back to surface. The stumps were recovered using the innovative lift packers and catch tool.

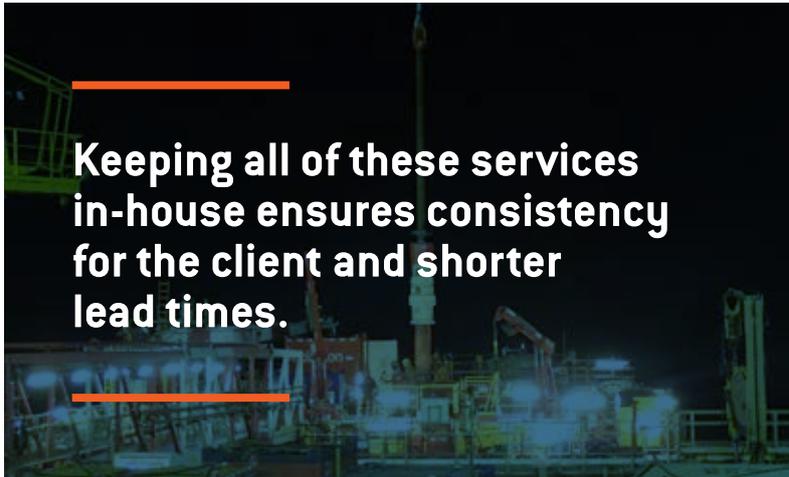
As the first phase was rigged down, preparation for the second platform got underway with the build and test of the required BOP platform. Especially designed for this project, it was then installed to allow tubing recovery operations to commence. The lightweight recovery deck was modified and utilised once again for conductor and casing lifting. The wells had complex requirements where the anchor-packer and specially designed catch tool and range of lifting gear were required in addition to the SABRE suite. Tubing and conductor severance and recovery was then successfully conducted 10ft below the seabed.

THE RESULT

For the client, the project resulted in the safe recovery of all wells across both platforms, with a quick turn around on the equipment that needed to be manufactured for the job. It was a big project, with over 30 lifts and a busy platform from the outset. A total of 3,600 items were dispatched during the first phase and 1,800 for the second. The logistics of the multiple load-outs was managed seamlessly by the Claxton onshore operations team.

Chris Wetton, one of the Claxton Project Engineers involved, said; “The requirement was complex and the timescale was tight but thanks to Claxton having R&D and design capabilities we were able to develop the equipment needed for the job and provide the accompanying specialist service technicians. We believe that keeping all of these services in-house ensures consistency for the client and shorter lead times.”

The client was impressed with Claxton’s performance and stated that, “Claxton showed great innovation on the project from the outset. The rapid development of the bespoke equipment was integral to the success of the project.”

A photograph of an offshore oil rig at night, illuminated by artificial lights. The rig's complex structure, including towers and platforms, is silhouetted against the dark sky. The water below is dark, with some light reflecting off the surface.

Keeping all of these services in-house ensures consistency for the client and shorter lead times.