Conductor Cutting Success Story

Technology delivers improved conductor cutting performance

- ConocoPhillips is engaged in a long-term plugging and abandonment (P&A) campaign in the UK Southern North Sea and has completed 61 wells to date using drilling rig and rig-less solutions.
- With approximately 80 wells still to P&A, as part of the continuing focus on cost reduction, ConocoPhillips engaged with FORO Energy to trial their innovative laser technology for conductor cutting.
- In evaluating P&A performance since the campaign began, duration improvements were being made in most phases from rig interfacing to retrieving completion tubing and setting final abandonment barriers. However there was no improvement to conductor cutting and retrieval operations, which ranged from between 2 and 9 days per well with an average of 3.5 days per well.
- Realising the extent of this inefficiency, ConocoPhillips has worked closely with FORO Energy to trial their innovative laser cutting tools and have successfully deployed these at three locations to date.
- Successful cut and retrieval on several multi-string conductors and improvements to the hardware and processes continue to be made to optimise performance.

Achievement based on:
- Extensive onshore trials and acceptance trials.
- The collaboration with the technology supplier to develop system suitable for deployment in the North Sea environment.
- Best performance to date is 2.2 days (vs 3.5 days average per well).

OGA Decom Team comments

Potentially valuable contributors to successfully reducing well P&A cost will be the support for development and, more importantly, the implementation of new technology, in cooperation with specialist service providers.

Key facts

- Southern North Sea conventional average conductor cutting and recovery duration was 3.5 days (range 2-9 days).
- With FORO, successful cut and recovery of multi-strings across three locations – 2.2 days is best performance to date.
- FORO Energy, the rig crew and ConocoPhillips continue to work on modifications to improve the robustness and durability of this technology for offshore use.