

## An independent oil and gas company

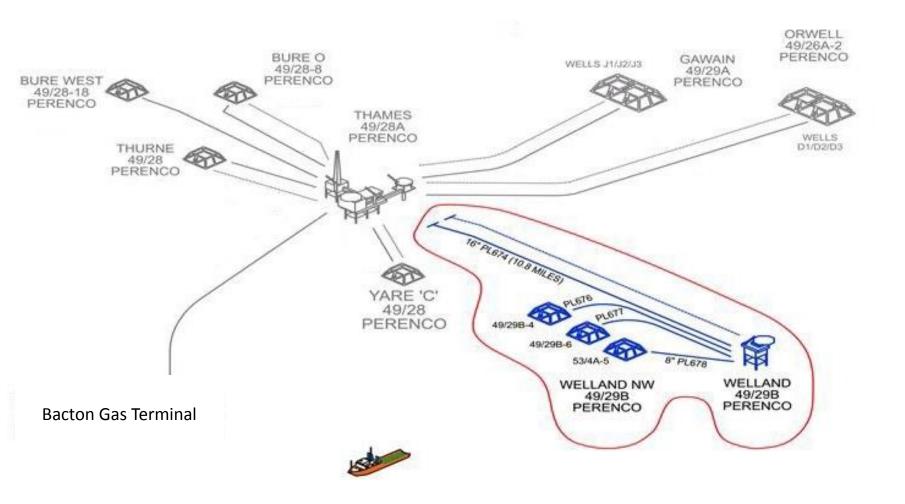
Ian Moulton Decommissioning Liaison Manager







Welland Decommissioning the next chapter







Topside and Jacket removed using a sheer leg crane and transported to Flushing Holland



The Welland topside were refurbished and renamed



Tow across Bay of Biscay towards West Africa

## PERENCO



Installed in its new location in Cameroon



What remained were 3 x 100Te piled protection structures.



The traditional method for removal of these structures is the use of:

Divers
Mass flow excavators
Diamond wire cutters or explosives

For Welland a different method was used.

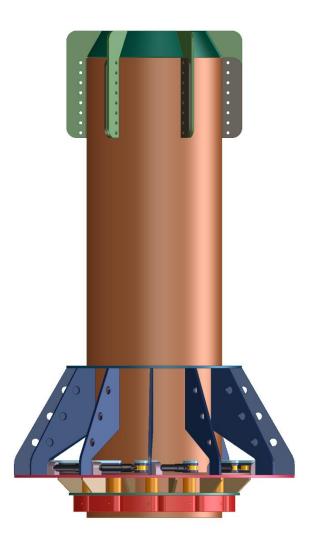
Via our main contractor, a Milling tool 'Maurice' was developed and deployed to site to mill out the grout within the pile ready to be cut internally using an abrasive water cutting technique.

The structure would then be lifted from the seabed and recovered to shore for disposal.

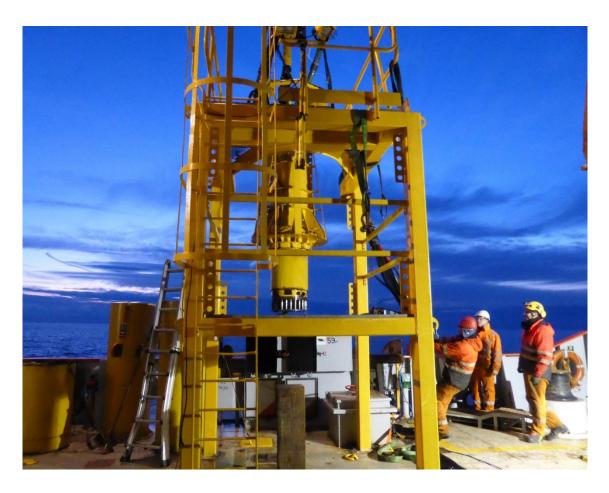


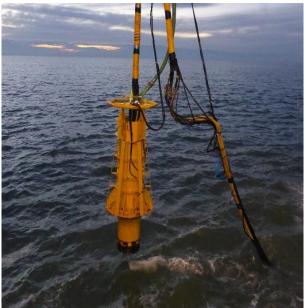
Maurice + Pile catcher



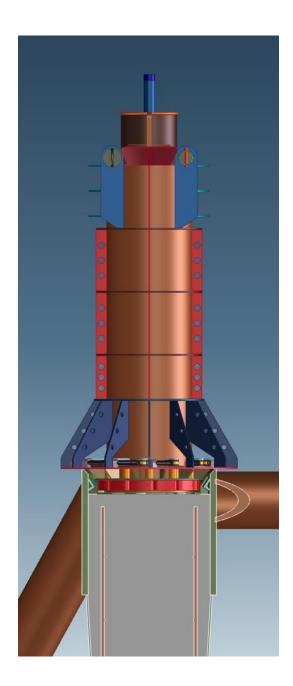


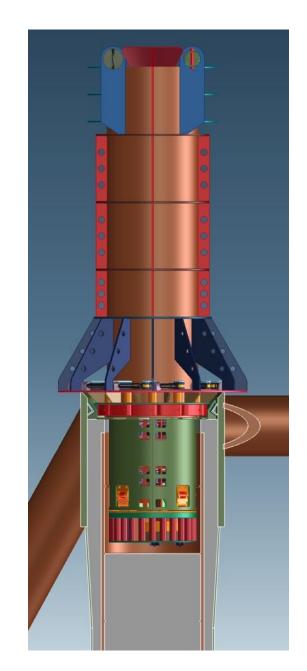
## P E R E N C O







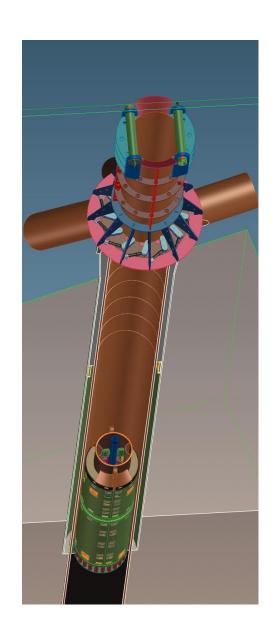


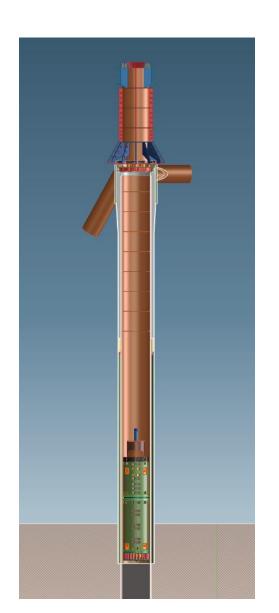














Innovation is rarely a smooth journey

The development of anything new is not without its difficulties, this was no exception.

There were false starts and learning opportunities but the system was successfully deployed in February this year and milling completed.

The delays were frustrating but all involved could also see the

potential future benefits which kept us committed.

Decommissioning in the UKCS is still relatively new when compared to our Production experience.

Future revenue growth encouraged innovation with the potential of enhanced production.

Future cost saving should drive innovation in decommissioning technology.

PUK currently have 68 jackets, 18 subsea structures and over 2400km of pipeline to decommission over the next 40+ years, innovation will be key in making that a safe and efficient operation.

Innovation will require commitment and a willingness to challenge the 'norm' to make that innovation an Operational success.

We need to share our successes.

We need to share our failures.

What can you do to bring success through innovation to decommissioning?



Thank you