‘Slant’ Modular rig overcomes unique well decommissioning challenge

The Achievement

Due to the need to develop high outstep wells on the shallow Sherwood reservoir, wells on the South Morecambe field are ‘slant wells’, drilled at a 60° angle from surface*. To decommission these wells, a traditional (vertical) derrick/mast cannot be used.

A solution proposed by the supply chain, and now successfully implemented for the decommissioning of wells on platforms DP3 and DP4, was the modification of an onshore rig design. This has a hydraulic mast capable of tilting from vertical to slant, skidding capability to move across the platform deck, and can rotate to align with each well. The small footprint and light modular design allow installation using a platform crane. The system offers flexibility as can also be used with conventional, vertical wells.

*Modern directional drilling technology has fully replaced the need for this approach making these wells a “unique” challenge.

OGA Decom Team Comments

A great example where technology advancements as well as innovative thinking and great cooperation between Supply Chain and the Operator, has led to a cost-effective decommissioning solution of very unusual wells in the East Irish sea.

Key facts

- The rig footprint is small (12m x 12m x 30m) and has a light modular design (200 metric tons total with each part weighing less than 30 metric tons) allowing installation using the platform crane.
- The well decommissioning was carried out in 2019 - 2020 as part of a campaign to decommission the South Morecambe DP3 and DP4 platforms.
- The rig can be used to decommission the remaining slant wells in Morecambe Bay but can also be utilised for standard wells.