

SUBSEA PILE / INFRASTRUCTURE CUTTING & RECOVERY

Safe, efficient pile & conductor cutting and recovery operations



The Challenge

Claxton were contracted to deliver soil plug removal, internal pile cutting, and pile recovery services at the Seven Seas Wellhead Protection Structure alongside an additional conductor cut at Grove Deep in the Southern North Sea.

Due to significant seabed scour affecting the wellhead protection structure, retrofit telescopic legs had been required to maintain structural stability. This added complexity to the operation and demanded thorough planning to ensure the safe and successful execution of the cutting and recovery scope.

The Solution

The retrofit telescopic legs were removed first to enable access to the internal piles. Claxton deployed a Diamond Wire Saw (DWS), configured specifically to achieve an angled cut. Two cuts were executed on each leg, not only providing access to the piles but also reducing the size of the sections for safer and more efficient recovery to deck.

Claxton then utilised the xcalibre Abrasive Cutting Solution with the Internal Pile cutter (IPC) to deliver subsea cuts just below the structure, enabling full recovery of the structure to deck.

Once on deck, further IPC cuts were performed on the four remaining stubs. Following completion of those cuts, the Menck Internal Lifting Tool (ILT) was successfully deployed to retrieve the stubs. The 16-36" ILT used for the operation has an axial lifting capacity of 15T and an upending capacity of 150T and forms part of a wider range of ILTs capable of handling pile sizes up to 96".

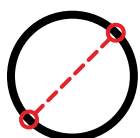
At the Grove Deep conductor, Claxton deployed the Soil Plug Removal Tool (SPRT) as a drift before carrying out the IPC cuts.

The Result

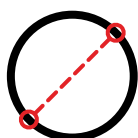
All four piles were successfully dredged to a depth of 12 metres from the top of pile, with highly efficient operations achieving an average dredging time of just 30 minutes per pile.

At the Grove Deep conductor location, the operation was also completed successfully. Upon completion of the cut, the ILT was deployed, enabling the safe and efficient recovery of the conductor.

The Project in Numbers



Piles 30" Diameter &
1" Wall Thickness



Conductor 30" Diameter
& 1.5" Wall Thickness



SPRT Operations
Averaged 30mins

Wellhead protection structure after piles had been internally severed and retro fit legs removed



30" pile recovery using the Menck 16-36 ILT after the pile had been severed 3 meters below mudline

