

Total E&P UK Seabed Preparation for Jack-up Installation

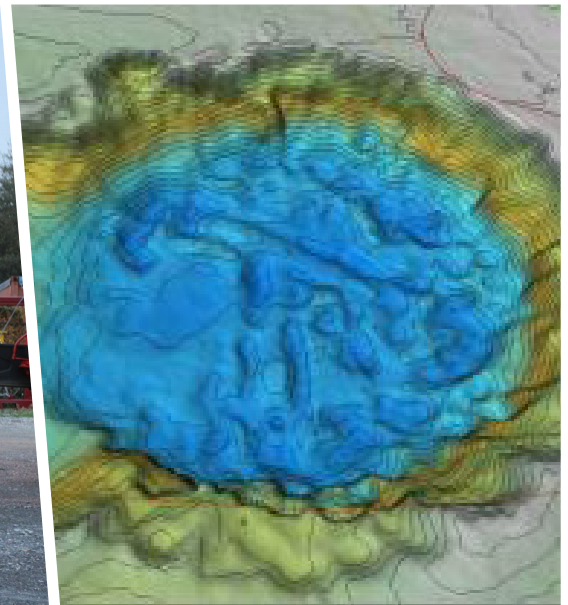
Equipment: DP600 Cutter Suction Dredge

Vessel: Olympic Triton

Soils: Clay up to 110kPa shear strength

Water depth: 92m

Mobilisation: Rosyth, Scotland



Scope of work

A new jack-up rig was due to be located beside a platform in the North Sea. A previous rig had left spud can depressions of a different pattern to the new rig. This resulted in a requirement to excavate three areas each approximately 25m diameter by 3m depth. The water depth in the area was 92m.

KDM Marine International proposed a specialist piece of equipment called the DP600. The hydraulic dredge tool mechanically cuts hard soils and removes the excavated spoil out of the area through a 10" discharge hose. The spoil can be either lifted up into the water column and transported away in the prevailing current or disposed in a dedicated area.

Outcome

This was an extremely challenging project which two previous methods employed by the client to clear the areas had failed to complete.

The DP600 was chosen by the main client to be the primary excavation tool with final 'profiling' of the holes undertaken by a more conventional venturi-driven suction tool.

The three areas 25m diameter x 3m depth were excavated in approximately 120 operational hours.

Jerome Lucas, Wells Operations Manager at TOTAL E&P UK, said:

"Following the various issues experienced earlier this year to dredge the location in the vicinity of a producing platform, the Tusk DP600 tool was seen as a clear step change in the dredging method combining both mechanical cutting and pumping capability at the same time. The tool clearly met the promises made by KDM in terms of efficiency and reliability. This tool is now considered field proven for harsh environments and at this water depth. I would personally recommend it for such dredging operations. I also greatly appreciated the professionalism and commitment of KDM in making this first trial in the North Sea a success with operations performed safely and efficiently."