

## Abstract 038 – Stena Drilling

### MTS Conference – October 2018 Abstract.

**“Back to Work” - The Reactivation of a DP3 Semi-Submersible to time and budget constraints yet exceeding Client and Industry standards, to work in harsh environment - West of Shetland, North Atlantic Ocean.**



The Stena don is a DP 3 Classed 4<sup>th</sup> generation semi-Submersible drilling rig designed for mid water drilling, completion and intervention work by Kvaerner Maritime. It is a CS-30 design type and was built by Kvaerner Warnow Werft GmbH Germany and delivered in 2001.

Since delivery, it had worked continuously for Stat Oil West of Norway, apart from a one year drilling campaign offshore Greenland. The contract ended after 15 years in January 2016.

Upon completion of her contract, the rig was warm stacked with a full marine and maintenance crew in Hanoytangen, Norway, while Stena continued to market the rig to the Norwegian operators.

After 18 months it became clear that the downturn in the oil industry was more prolonged and deeper than expected or experienced before and in addition the Norwegian market had received 4 new CAT D drilling units which made the prospect a drilling contract remote.

Stena reluctantly took the decision to remove the rig from Norway (thus saving massive warm stack costs), remove the six thrusters and smart stack the unit in the UK. First in Invergordon and then at a later date in Scapa Flow Orkney.

The Classification was changed from Operational to laid up by DNV all drilling and subsea equipment was preserved and sealed for medium term stacking. A small crew of maintenance personnel were retained to run engines and keep the lights on. In the meantime, Stena contracts kept looking for opportunities and innovations to reactivate the unit.

Mid- January 2018 we were contacted by a major oil operators and asked if we could offer the Stena Don for an exploration contract West of Shetland, UK starting on the 1<sup>st</sup> of May. In order to have the rig available to work we needed to complete the following in 60 days;

1. Re-locate the rig (without power) from Invergordon to Scapa Flow Orkeny.
2. Moor the rig in compliance with DNV guidance – without winches.
3. Transport six thrusters from Norway and re-attach in open sea.
4. Re-Class the entire vessel to DNV standards.
5. Re- activate all drilling and subsea systems.
6. Submit an entire new Safety Case to the UK HSE.
7. Fit 4 new Life Boats – delivered from Las Palmas, Canaries.
8. Obtain 2 new crews – complete training, competency assessment and familiarization.
9. Re-commission and certify Heli deck to CAP-437 edition 8.
10. Re Class and commission the entire DP system.

This paper will focus on the reactivation of the DP system and subsystems.

As stated above the main issue for us was that's the thrusters were some 600 miles away from the rig at the start of the project.

The Stena Don was upgraded in 2015 mid-life overhaul with a complete new Kongsberg K-Pos system and Siemens IAS automation system. Both these systems were powered up during the entire stacking period and rig maintained heating and atmosphere control.