CASE STUDY
Reference no. CS.PP.UK.WA.007

PIPELINE & PROCESS

SUCCESSFUL TOWHEAD BALLASTING BRINGS SUBSTANTIAL SAVINGS TO PROJECT

Country: UK
Field Catcher
Year: 2016
Technologies: **Pipeline Services ● Front End Engineering ● Pressure Pumping**

ALTUS Intervention

MAKING INTERVENTION SMARTER

Complete pre-commissioning of three bundles, including:

- Ballasting of the bundle towheads for 3 x bundles
- New, pre-mixed fluid being used for the first time resulting in significant time and cost savings

CHALLENGE

As part of the wider Subsea 7 Catcher contract in 2016, Altus Intervention was required to provide engineering, equipment and personnel to complete the ballasting operations of the towheads on the Catcher, Varadero and Burgman bundles once in position offshore. Originally, barite powder was to be transported offshore in the dry bulk tanks of the support vessel. The dry powder was then to be transferred to deck, using dry compressed air and then mixed with seawater in blender units. Pre-determined volumes of the slurry would then be pumped (using diesel driven pumps) into the towhead structure tubulars via a downline. The anticipated offshore timescale to complete the operation in this way was scheduled to take 28 days.

SOLUTION

The Altus Intervention team challenged the conventional method of towhead ballasting and came up with an innovative solution. Rather than transferring dry bulk / mixing on the fly / ensuring the fluid mix did not settle, an alternative option of receiving a pre-mixed slurry was sourced. The slurry was supplied, mixed from an onshore facility and transferred directly to the vessel bulk tanks (from the supplier quayside storage), ready for uninterrupted pumping when required. The supply vessel was able to carry the full consignment of ballast fluid required to carry out the offshore operations.

RESULTS

The towhead ballasting project was successfully completed in a quarter of the anticipated timescale due to the Altus Intervention team challenging convention and providing an innovative solution which resulted in major cost and time reductions.
The, now standard, pumping operation utilising the pre-mixed slurry resulted in significant savings to the client through a reduction in vessel hire time and a greatly reduced equipment spread. Due to the reduction in equipment spread, the mobilisation times were reduced and the number of personnel required to carry out the work was also reduced – all contributing to the overall savings. Further to the reduction in costs and durations, the HSE risk was reduced with the exposure to dust and chemicals being minimised due to the chemicals being contained in an enclosed system.