

Intercept[®] Retrievable Bridge Plug Combines With CleanWell[®] Technology to Save Equinor 3 Hours Rig Time

WELLBORE SERVICE TOOLS COMBINATION RUN SAVES EQUINOR OVER \$53,000 USD

NORTH SEA

CHALLENGE

Equinor required a temporary suspension between the drilling and completion phase

- » Single-trip operation
- » Prevent debris from falling on the RBP

SOLUTION

The Intercept RBP in combination with CleanWell technology.

- » Extensive pre-planning
- » No additional personnel required onsite

RESULTS

Successful combination run saved over \$53,000

- » Intercept RBP tested to 5,000 psi
- » Vali Tech filter collected 84 lbs of debris

OVERVIEW

Equinor wanted a reliable ISO 14310 V0-rated retrievable bridge plug (RBP) to temporarily suspend their well. Additionally, they wanted to displace the well, clean the riser, blowout preventer (BOP), and wellhead in the same run to save valuable rig time.

CHALLENGE

During the planning of the well (an advanced producer), Equinor opted not to drill the reservoir section before suspending the well, which meant the full wellbore cleanup run would not be conducted prior to moving to the next well in the campaign.

The standard operation for the wells on this project had been to complete the required operations over two runs. The first run to set the Intercept retrievable bridge plug, then a subsequent run to perform the clean-up of the riser and BOP sections.

To increase efficiency, Equinor turned to Halliburton to come up with a solution that would allow them to install the Intercept RBP, displace the well to packer fluid, clean the riser, BOP, and wellhead in one run. Additionally, they asked Halliburton to develop a solution that would prevent debris from the BOP falling down on the installed Intercept RBP.

SOLUTION

Halliburton proposed combining these field-proven technologies to meet the objectives set for the operation:

- » 13 5/8-in. Intercept RBP V0 Barrier
- » 13 3/8-in. – 13 5/8-in. Vali Tech[®] wellbore filter/junk catcher
- » Jetting Drain Sub – a single ball-activated jetting tool for the BOP/wellhead
- » Mag Tech[®] riser magnet to catch magnetic debris
- » Riser Bristle Tech[®] brush to clean the ID of the riser

During the planning phase and prior to running the job, Halliburton conducted internal Critical Well Reviews to capture possible risks with the planned operation. A pre-job meeting was also conducted with all involved personnel prior to the operation. As an additional cost reduction initiative, Halliburton utilized cementing personnel for the installation so that no additional Halliburton personnel were required on location for the operation.



The Vali Tech® filter collected 84 lbs of sponge balls, cement, composite, aluminum, cuttings, and steel swarf debris.

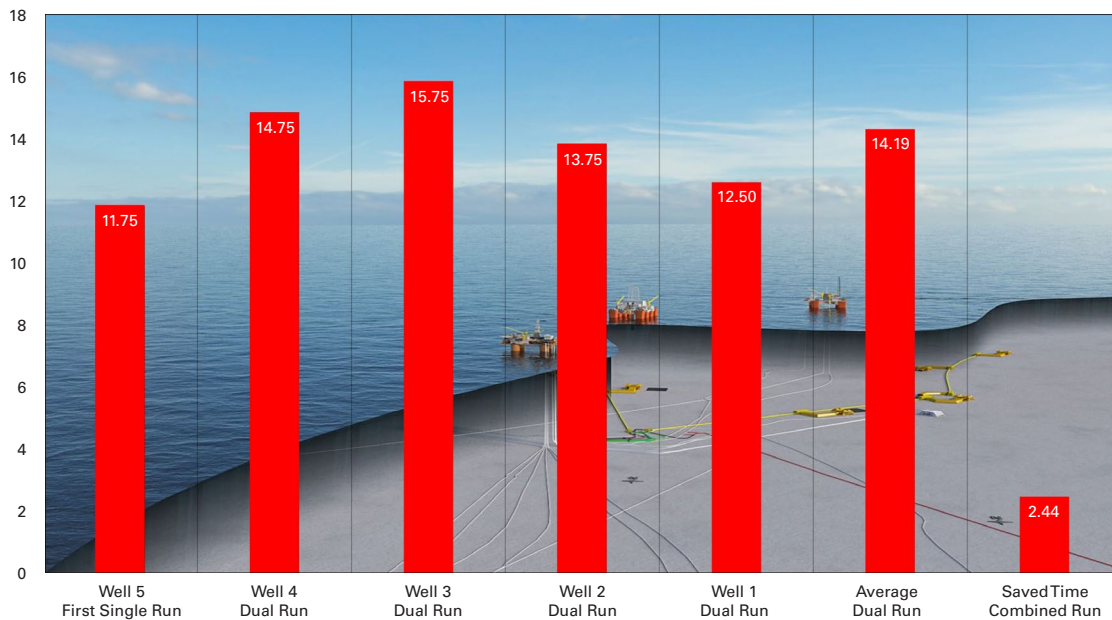
The job was performed as per below:

1. Ran the BHA as per pre-planned space out / tally
2. Set the 13 5/8-in. Intercept RBP according to procedure
3. Displaced the wellbore to packer fluid through the Intercept RBP overshoot
4. Dropped the 2.25-in. steel ball to activate / open the Jetting Drain Sub and positioned it below the BOP/Wellhead. Once open the ball blocks all flow from the JDS to the bit.
5. Jetted the wellhead and BOP according to agreed procedure
6. Functioned BOP rams and annular according to rig procedure
7. Pulled out of hole (POOH) and laid down equipment

RESULTS

The Intercept RBP was set and tested to 5,000 psi. Both wellbore cleaning tools performed successfully with the Riser Mag Tech magnet recovered 10 lbs of debris and the Vali Tech filter catching 84 lbs of debris that otherwise would have dropped on top of the RBP. Equinor was very pleased with the customized operation, as Halliburton met all of the objectives set. This was the first time the combination was run globally and the solution saved three hours of rig time, equivalent to \$53,000 when compared to performing the same operation with two dedicated runs.

Halliburton Improvement Initiative - Single Run Set plug and wash BOP Total time [Hrs]



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