Case Study: Expandable Junk Catcher Add-on (EJC-A)

Challenge

Mature fields with high water cut often increases debris in the tubing and can present many challenges when intervention operations are required. Debris also presents issues when setting and retrieving barrier plugs, resulting in difficulty accessing the plug's fishing neck and plugging off the equalizing ports.

The normal procedure is to run a separate junk basket on top of a deep plug to catch falling debris. However the junk basket has to be set and retrieved by additional runs, which are time consuming and costly. These additional runs could cause debris to be scraped from the tubing wall and pushed on top of the plug when running in hole.

Solution

Interwell's Expandable Junk Catcher (EJCA) is a modular add-on that can be run in combination with our existing and technically proven line of barrier plugs, and is completed in a single run and retrieval solution.

In a mature well application in the North Sea, Interwell ran a 420-550 ME plug with 420-550 EJCA as a deep barrier together with a regular 435-550 ME plug as a shallow barrier. After the XT was replaced, both plugs were retrieved without any challenges. The EJCA was retrieved using the Welltec Stroker tool due to the well deviation where the plug was installed.

Value Created

Using the ME plug with integrated EJCA resulted in a time and cost efficient operation without the need for additional runs to install and retrieve a separate junk catcher. By eliminating junk catcher runs, the risk of debris settling on top of the plug and a potential clean-up trip was greatly reduced. The intervention operational time was reduced by approximately 24 hours and the operator saved at least $250k compared to traditional operations.

Date:
August 2013

Region/Field:
Norwegian North Sea

Key Capabilities:
- Innovative swab-cup that effectively funnels debris into the catcher
- Both setting and retrieving of EJC-A + Bridge Plug is done in one run
- Can be run on Wireline
- Retrieve with standard GS with DU and dedicated prong

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