

# Case Study: Multi Setting Pulling Tool (MSP)

## Challenge

Historically the standard method of setting and retrieving plugs and the internal tree cap in the tubing hanger is to use wireline as the conveyance method. Eliminating the use of wireline operations has been identified as high potential savings in both the completion and P&A phase. Interwell was challenged to develop a drill pipe tool for setting and pulling tubing hanger plugs, thereby limiting the need for wireline operations.

## Solution

The greatest challenge during tool development was to maintain consistent pressures in the tool, in order to identify setting and pulling of the plug multiple times without shearing parts that require redress afterwards. This was achieved with a snap sleeve design combined with an internal jarring bolt. Combining this with the standard Interwell flow release GS design, to enable release after setting, Interwell has now developed and tested the Multi Setting Pulling (MSP) tool.

## Value Created

The MSP was used in multiple completions in the Norwegian North Sea to install tubing hanger plugs. A 7" flow-release GS on pipe was then used to pull the isolation sleeve from the tubing hanger, making it possible to exclude use of wireline on completions. From the locking of the tubing hanger until the finishing of the completion, an average of 12 hours was saved by using the MSP when compared to traditional wireline operations.

**Date:**

May 2014

**Region/Field:**

Norwegian North Sea

**Key Capabilities:**

- Drillpipe deployed - no wireline
- Time saving of 12 hours achieved (based on run records)
- Ability to set/reset plug

