

Case Study:

SwellRight Side Pocket Mandrel Plug seals damaged mandrel bore for North Sea operator

SwellRight Side Pocket Mandrel Plug successfully isolates leaking side pocket mandrel for global operator in the North Sea.

Well Data

Location: North Sea

Well Type: Oil Producer

Installation Date: March 2015

Side Pocket Diameter: 1"



TAQA was asked to provide a sealing solution for a leaking side pocket mandrel. It was essential to provide a solution to avoid the need for an expensive workover to replace the leaking side pocket.

The Challenge

A major North Sea operator required a robust solution to seal a leaking gas lift mandrel and be able to withstand 5000psi. The chevron stack seals were damaged and replacement seals were no longer able to be sealed in the damaged mandrel bore.

TAQA Solution

TAQA's SwellRight Side Pocket Mandrel Plug was deployed to seal the leaking mandrel bore, proving to be the ideal solution. A dummy valve was wrapped with water swellable rubber capable of sealing in the leaking mandrel bore and

holding 5000psi. The ease of installation and effectiveness of the product was extremely beneficial to the operator as it eliminated the need for intervention, pulling the entire completion to replace the leaking mandrel bore. Not only was it the simplest of solutions, it also reduced the risk factor and the cost of intervention.

Project Results

TAQA's SwellRight Side Pocket Mandrel Plug successfully isolated the leaking side pocket mandrel, withstanding the required 5000psi, and eliminating the requirement for a workover.



Damaged Gas Lift Valve



SwellRight Side Pocket Mandrel Plug