Case Study: First Global Run of THEX

Challenge

In order to allow the client to change over a well from a water injector to a producer, there was a requirement to set a retrievable bridge plug as a barrier in the 7" liner prior to recovering the existing completion. However, downhole parameters of the well posed a challenge. With temperatures in excess of 150 degC, differential pressure on the plug up to 4,000psi and a minimum restriction in the upper completion of 4.562", it was challenging to find a company who could supply a suitable plug.

Solution

Interwell's High Expansion Retrievable Bridge Plug (HEX) is the most versatile mechanical plug on the market, designed to pass through narrow wellbore restrictions and set in larger ID casing. The High Temperature High Expansion plug (THEX) is a new development of the successful HEX technology, providing an ISO14310 Vo rated plug capable to withstand temperatures of up to 160 degC and differential pressures of up to 5000psi. The THEX was the ideal candidate for this operation, capable of passing through the minimum restriction and being set in 7" 29# Liner. The 440-700 THEX bridge plug with a 4.40" OD was successfully set at 3650 m MD/RT as a deep set barrier allowing the operator to perform the re-completion of the well.

Value Created

Interwell provided a solution that other companies were struggling to. This operation was the first THEX set globally and the client was very happy with the successful operation.

Date:

December 2016

Region/Field: West Africa

Key Capabilities:

- Large expansion
- Slim design
- Centralizing adapter kit ensures centralization of packer element during setting
- Equalize and retrieve with standard GS in a single operation (no prong required)
- Can be run on slickline, e-line, coiled tubing and pipe
- Other sizes available on request



