Case Study: High Expansion Bridge Plug in The Middle East

Challenge

A major operator on the Arabian Peninsula faced problems in a well with a stuck lower master valve; they were unable to function the valve for nipple up/nipple down operations. With the OD of approximately 3.8" measured via drift, the client needed a solution to pass the restriction and be set in the 26# 7" tubing above the TRSSSV to secure the well.

Solution

The 3.8" restriction in the master valve on the tree made options limited. Solutions such as coiled tubing milling, through-tubing expandable bridge plug with cement, and freeze plug were evaluated; however, due to operation complexity these alternatives were not chosen.

Interwell provided a superior solution by installing two High Expansion (HEX) Retrievable Bridge Plugs that were set in the 26# 7" tubing above the SSSV. The HEX plugs were run on Wireline and tested to a minimum of 1,500 psi.

Value Created

By using Interwell's HEX bridge plugs, the well challenge was addressed with a simple solution that was able to pass through the restriction when no other option was economically feasible. The alternatives would have involved significant time and cost for the additional equipment required, as well as leading to operation complexity.

The Interwell HEX plug was recommended because it was technically feasible being able to pass-thru ID limitation with high differential pressure rating, has a good history run, is retrievable, and cost effective.

Date:

August 2015

Region/Field: Middle East

Key Capabilities:

- Highest expansion retrievable bridge plug on the market
- Short tool length
- Ideal for workover applications: tubing barrier, packer for injection valve, and fixed choke
- Slim design (small OD)



