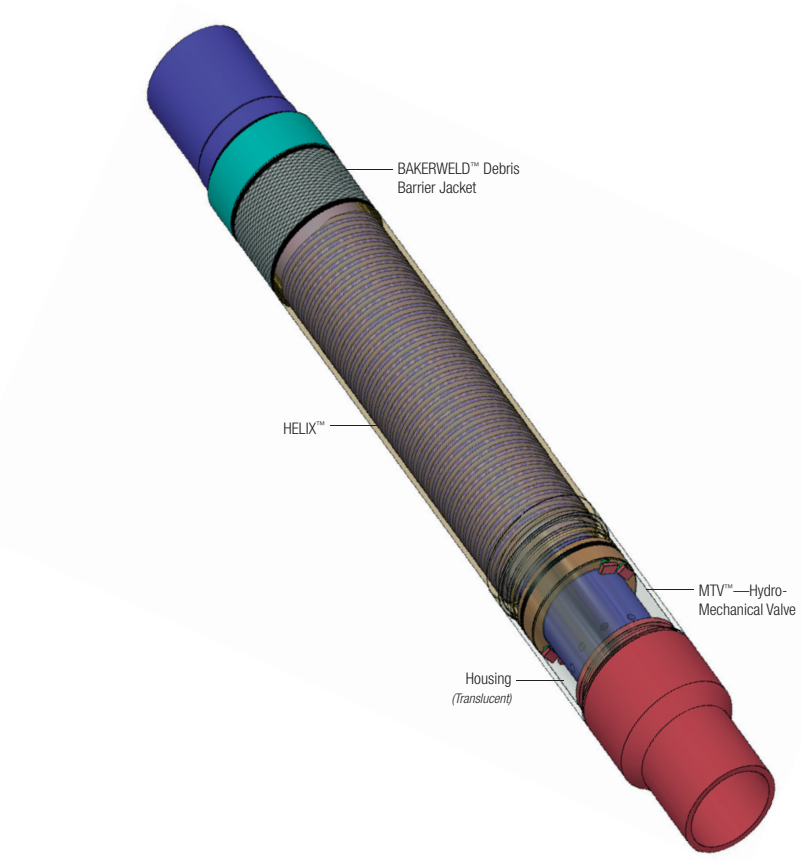
First Worldwide Installation of Baker Oil Tools EQUALIZER CF With MTV Technology

Benefits

- The lower completion was installed in a single trip
- The upper completion was run without losses
- Improved HS&E through the elimination of running washpipe

Background

In February 2009, a major operator with a mature field in Saudi Arabia was experiencing losses while drilling and completing the pay zone because of a water-bearing formation above the lower-pressure oil-bearing reservoir.



*EQUALIZER CF technology with MTV (*patent pending)*

Baker Hughes Solution and Results

The multitasking valve (MTV™) was developed to temporarily block the inflow-control device on the EQUALIZER-CF™, effectively turning it into a tubular without the need to run an inner string. The MTV is opened by blocking the end of the tubular string and pressuring up on it to predetermined pressure. Upon bleed-off, the valve opens to allow production as determined by the EQUALIZER-CF flow rate rating. Since the MTV opens once pressure is bled off, it allows liner hanger packers and formation isolation packers to be set concurrently.

A total of 11 EQUALIZER-CFs were installed. Baker MPas™ isolation packers were run on a Baker Oil Tools SLZXP™ liner top packer with the well on static losses of 60 bbl/hr. Once the packer setting ball was set on seat and the liner top packer and MPas isolation packers set, these losses ceased, allowing the upper completion to be run without losses and in a single trip.

This achievement was a first for the operator. The cost savings were from reduced rig time from not having to run an inner string, savings in fluid losses downhole and the associated cost in surface logistics, elimination of trips caused by the need to replace damaged swab cups when setting the MPas packers, and installing the upper completion.

By eliminating the need to run washpipe, improvements were made in HS&E through the elimination of lifts and handling as well as savings made through the elimination of all washpipe logistics including inspection and repair.

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