

Case Study: High Expansion Solution for Horizontal Well

Challenge

A Middle Eastern client faced a decline in oil production after a lower zone of the completion and an Inflow Control Device (ICD) started producing water. The horizontal well proved a challenge to isolate, with the setting depth being below the second packer at a depth of 8880 ft, with 88deg at one of the equalizer screens.

Solution

Due to the restriction on the upper completion and in addition to the challenges of the setting depth deviation, it would have been very difficult for the client to isolate the water production zone by using the traditional methods of inflatables or cement plugs. As a result of the lower completion containing ICDs, the client required a retrievable solution with a high pressure rating to avoid any drilling/milling operations in the future.

Interwell proposed the unique High Expansion (HEX) Retrievable Bridge Plug technology, as a solution to the client's challenge. The 280-550 HEX plug had to pass a 3.725" restriction on the upper completion and set across the equalizer screen with an ID of 4.950".

Value Created

Thanks to its slim design, the HEX plug was able to pass the restriction, isolate the water production zone, and bring the well back to 100% production.

Date:

October 2016

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)

