

ACTive Straddle Inflatable Packer Stimulates Multilateral Well in One Run

Kuwait Oil Company restores production to 6,300 bbl/d while cutting stimulation time in half

CHALLENGE

Reduce rig downtime while bullheading stimulation fluid into the target intervals.

SOLUTION

Use ACTive Straddle* CT real-time multiset inflatable packer to treat the main wellbore and a lateral in the same run.

RESULTS

- Restored well production.
- Reduced job length from 4 days to just 2 days.
- Eliminated multiple costly runs associated with conventional bullheading treatments.



Multilateral well leads to inefficient stimulation treatments

To offset the natural decline in a field discovered in the late 1950s and optimize extraction of oil and gas, Kuwait Oil Company (KOC) had applied many different technologies, including water injection, multilateral wells, and targeted stimulation treatments.

In one multilateral well, KOC needed to isolate and inject stimulation fluids into the main wellbore and the lateral. However, conventional bullheading could result in fluids going into the wrong wellbore. The only way to successfully bullhead both zones would require a series of runs—which could take 4 or more days.

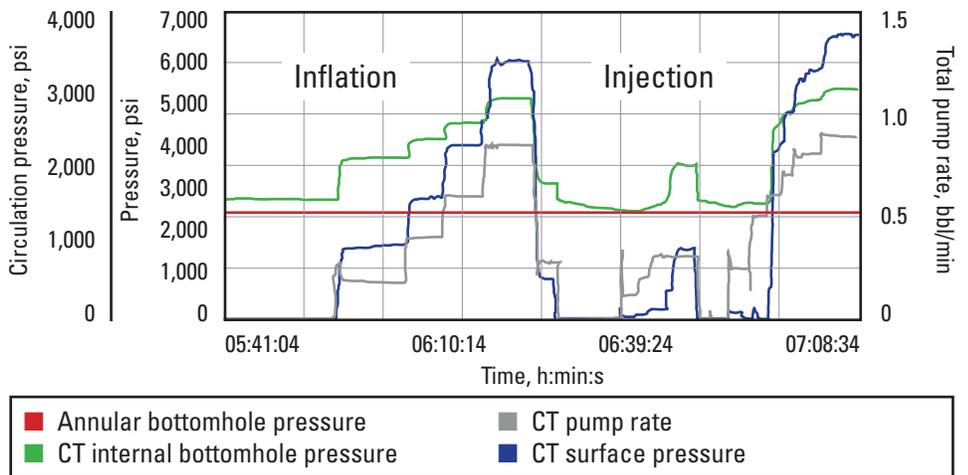
ACTive Straddle packer eliminates multiple runs

Schlumberger worked closely with KOC to find a way to eliminate multiple runs and the associated time, risk, and costs. Using the ACTive* family of live downhole coiled tubing services, Schlumberger deployed an ACTive services bottomhole assembly and its integrated casing collar locator (CCL) to set ACTive Straddle packers and treat the well in a single run.

First, the packers were set and inflated at 6,953 ft [2,119 m], just 40 ft above a closed valve in the primary wellbore. ACTive TC* live CT tension and compression tool provided downhole load measurements, confirming the packers were securely anchored in place before targeted injection. The same packers were placed and inflated across the lateral—with the lower packer at 6,603 ft [2,013 m]. After the second injection treatment, the packers were deflated and the system was pulled to surface and rigged down.

KOC stimulates multilateral well in one run and in half the time

Schlumberger and KOC successfully restored the well's production while dramatically reducing nonproductive time. ACTive Straddle packers made it possible for KOC to inject stimulation fluids into two separate zones in just one run instead of four. The entire job took less than 2 days—half the time it would have taken with conventional methods—and the ACTive Straddle packer is now deployed in additional wells that face similar challenges.



ACTive Straddle downhole and surface parameters graphic during inflation and injection. Downhole annular pressure (red line) indicating no variations during injection, demonstrating sealing packer elements.

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Coiled Tubing

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