

CASE STUDY- 2020- MIDDLE EAST

Archer Cflex® & OH packer solution effectively cements above a historically troublesome loss zone improving well integrity, isolation and resulting in considerable cost saving

Challenge

An National Oil Company (NOC) in the Gulf Cooperation Council (GCC) region has historically been unable to consistently achieve competent cement above a loss zone -2000ft - 2500ft above the 9-5/8" casing shoe at -7500ft. This challenge often leaves 5000ft + of inadequately cemented casing leading to corrosion issues, resulting in compromised well integrity over time. The current solution utilizes top down cement squeeze jobs from surface that are mildly effective and often leave areas un-cemented leading to multiple issues in the future, including sustained annulus pressure and casing corrosion.

Result

The execution of the job from start to finish was flawless with all equipment performing as expected. Subsequent logging of the casing showed significant improvements in cement coverage across the target zones.

This proved the solution effective allowing the NOC the option to change well design and save 7-10 days in rig time per well, equating to around 700+k USD in cost.

Solution

The Archer Cflex® and open hole packer solution proposed was a 2-stage cement job utilizing an inner string that would allow efficient, accurate and effective placement of cement around all target zones.

The primary job was performed through an Archer supplied tag in float system allowing the packer to be set and Cflex® opened before the 1st stage cement set up. The open hole packer situated just above the loss zone, was then inflated, to isolate the losses and provide a fundament for the column of 2nd stage cement. After packer inflation the Cflex® directly above it was opened with Archer's inner string cementing tool and excess cement was circulated out from the first job.

A 2nd stage cement job was then performed through the Cflex® above the open hole packer.

Cflex® and OH Packer 2 Stage Cementing Solution

