CASE STUDY- 2020- MIDDLE EAST

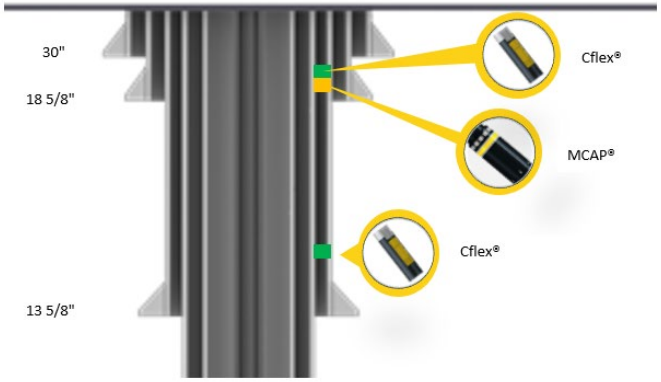
Archer Cflex® & MCAP® solution allows a major operator to achieve competent cement and isolation on a highly challenging well

Challenge

During drilling of the 17.5" section the operator experienced heavy losses followed by significant gains from a suspected drilling induced fracture. Although the well was somewhat stabilized for casing installation it was suspected that conventional cementation of the casing would prove problematic.

Solution

The operator decided to install one Cflex® ~5500 ft above the shoe at ~6500 ft as a contingency cementing option if the primary was unsatisfactory. A second Cflex® was installed ~140 ft above the 18-⅝" casing shoe at ~2300 ft, directly above the MCAP®, to isolate the problematic zones deeper in the well. This upper Cflex® & MCAP® contingency would help the customer ensure isolation in the uppermost section of the 13-⅝" casing.



Result

The primary cement job was performed conventionally through the shoe and, as expected did not achieve the required cement coverage due to losses encountered when pumping cement.
As a result the Cflex® cementing tool and MCAP® activation tool was RIH past the upper Cflex® and MCAP® and down to the lower Cflex®. The Cflex® was then opened successfully and a second stage job was performed through it in an attempt to achieve better cement coverage. Due to extremely challenging loss conditions it was not possible to achieve the column of cement required via the lower Cflex®. The MCAP® was then successfully set and tested to 500psi and the Cflex® opened using the activation tools in the drill sting. This isolated the problematic formations and allowed a controlled 3rd stage to be performed ensuring competent cement throughout the 13-⅝" x 18-⅝" Casing annulus.

The execution of the job from start to finish was flawless with all Archer equipment performing as expected. Subsequent logging of the casing showed very good cement coverage inside the 13-⅝" x 18-⅝" Casing annulus.

GUARDIAN™

Archer is a global oil services company with a heritage that stretches back over 40 years. With a strong focus on safety and delivering the highest quality products and services, Archer operates in 40 locations over 19 countries providing drilling services, well integrity & intervention, plug & abandonment and decommissioning to its upstream oil and gas clients. **We are Archer.**

Archer

www.archerwell.com/CementingSolutions