

CASE STUDY- 2021- NORTH SEA

Multiple Cflex® and tag in float collar allows for flexibility in assurance of critical zonal isolation**Challenge**

A major North Sea operator was planning a well in a field that had historically proven very challenging with primary cementing applications. There was potential for multiple loss zones and a requirement to achieve isolation of a shallow gas zone to prevent sustained annulus pressure.

Solution

Archer proposed to install two Cflex and utilize a tag in float collar to perform an inner string cement job. The upper Cflex placed above the shallow gas zone was to be used as a circulation point for both the primary and secondary cement jobs.

The lower Cflex would be used to pump the second stage cement job between it and the upper Cflex. The upper Cflex was also considered as a contingency that allows a potential third stage to be pumped to ensure isolation above the gas zone.

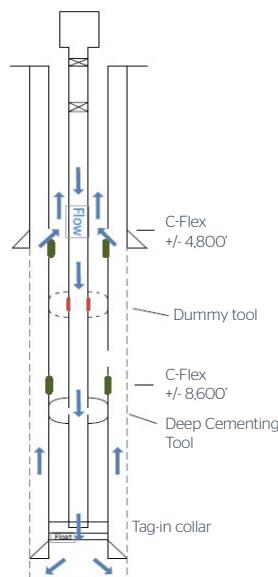
**Result**

In a single trip, the operator was able to accomplish the below:

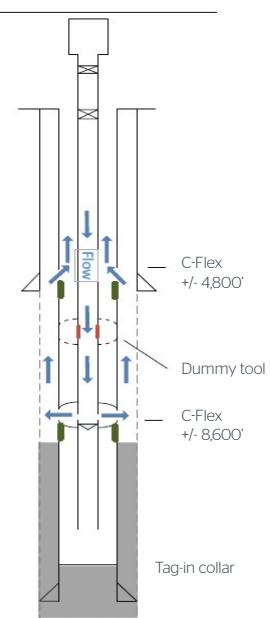
1. Open upper Cflex
2. Sting into tag in collar
3. Pump primary cement job
4. Open lower Cflex
5. Pump secondary cement job
6. Permanently lock both Cflex

The detailed planning and open communication with the customer lead to a successful completion of the objectives confirmed by operational parameters encountered during both stage 1 and 2 cement jobs.

Stage #1 (Foam)



Stage #2 (Conventional cement)



Stung into tag-in collar
Returns through shallow Cflex

Latched in to Deep Cflex
2nd Cement Stage