CASE HISTORY

WELL ABANDONMENT FOR SIDETRACK

2-7/8 in. TAMCAP used for a single-trip cement squeeze and abandonment plug

CHALLENGES: A major operator offshore Newfoundland in Eastern Canada was looking for a way to do a cement squeeze into a perforated lower zone and set an abandonment plug above that zone, all in a single trip. This dual barrier is required by the local regulatory body prior to sidetracking or permanently leaving a wellbore.

SOLUTION: The TAM Newfoundland team proposed a solution to achieve the above objective using a bottom hole assembly (BHA) whose primary components consisted of a Hydraulic Release with inner string connection, a 2-7/8 in. TAMCAP, and a Dual Flapper Float Shoe on the bottom. The BHA was deployed on coiled tubing, inside 7 in. tubing. Once on depth, cement was pumped down the string through the BHA to spot 30 meters of cement on top of a previously set bridge plug, allowing for isolation of the perforated lower zone. The TAMCAP was then pulled up to its setting depth, where it was set and released using the Hydraulic Release. Then the second 30 meters of cement was pumped, giving the operator a second cement plug and achieving the dual barrier required for abandonment.

RESULTS AND BENEFIT: The well was successfully abandoned to allow the wellbore’s sidetrack and recompletion to a new zone in the reservoir. The operator achieved substantial savings by doing this in a single trip as opposed to multiple coiled tubing trips. Feedback has been very positive, and the operator has shared this abandonment method with their team in Houston.