

Case History

High Performance Water-Based Fluid

LCM Pill Seals loss Zone in Deepwater Angola

Location: Luanda, Angola

OPERATOR'S CHALLENGE – After drilling the 17 inch hole section and pulling out with the BHA, 150 bbls/hr DH losses noticed with the estimated leak at 20 inch casing shoe. Instead of squeezing cement, the operator decided to trip back into the hole and decrease the mud weight in the riser from 9.6 to 9.3 ppg. As losses continued a 50 bbl HYDROPLUG pill was spotted across the 20 Inch shoe (~43.5 C BHST). This initially stopped losses completely allowing the operator to continue with the planned operations.

Next the operator ran the 13 3/8 Inch casing with no losses up to 3090 m where a tight spot was encountered. 540 bbls of mud were lost downhole trying to establish circulation in an attempt to work the casing to bottom until the decision was made to pull out the casing string. Some centralizers were left in the well. Once the casing string was pulled out, a side-track was performed.

HALLIBURTON'S SOLUTION – Halliburton Baroid recommended using HYDRO-PLUG™ to seal off a loss zone at the 20 Inch casing shoe where a low Leak-Off Test was initially achieved.

By using HYDRO-PLUG as a Cement Support in the open hole before setting a kick off plug, the cement remained in place and did not allow for any channeling inside the large rat hole that held the junk from centralizers left in the hole.

ECONOMIC VALUE CREATED – The Engineered HYDRO-PLUG Solution helped the operator save ~\$1,000,000 in a combination of rig time, SOBMs fluid lost and extra cement operations. The ability to avoid a cement squeeze job and successfully set a heavy open-hole kick-off plug proved invaluable to the operator. A well that would have normally been abandoned, was drilled successfully to total depth. Considering the exceptional performance, HYDRO-PLUG is now a necessary product to have on board for this operator.



HYDRO-PLUG™ lost circulation material – Superior Fracture Sealing Performance