PERFORMANCE BULLETIN

PBL® System Helped India Operator resolve challenges associated with zero returns and mud losses to the formation.

DSI
AN SBO COMPANY

Challenge

In two back-to-back offshore wells in India in the same field, an operator was facing issues with ongoing and multiple instances of zero returns and mud losses to the formation.

On the first well, a single PBL® was activated ten times to pump a sequence of cement and loss circulation material (LCM) recipes to cure the problem. On the second well, two PBL® tools were cycled seven times to pump a variety of LCM and cement slurries, with densities of up to 15.5 ppg.

Solution

On each attempt, the PBL® activation ball was dropped from surface and either LCM or cement was pumped. After cementing and following good practices, the tools were flushed clean and then deactivated by dropping two steel balls. Pumping was consistent to reach the activation ball shear pressure and deactivate the tool. The BOP was then closed, and the cement was squeezed and allowed to set before opening the BOP and continuing with operations

Well One Sequence

Material Pumped Through PBL®	Volume Pumped	Density
CEMENT	70 bbl	12.6 ppg
CEMENT	110 bbl	12.6 ppg
STOPIT LCM	100 bbl	50 ppb
CEMENT	90 bbl	12.6 ppg
CEMENT	120 bbl	12.6 ppg
CEMENT	150 bbl	12.6 ppg
CEMENT	180 bbl	12.6 ppg
STOPIT LCM	100 bbl	50 ppb
STOPIT LCM	100 bbl	50 ppb
STOPIT LCM	100 bbl	50 ppb

Well Two Sequence

Material Pumped Through PBL®	Volume Pumped	Density
CEMENT	80 bbl	12.6 ppg
CEMENT	150 bbl	12.6 ppg
CEMENT	180 bbl	12.6 ppg
CEMENT	150 bbl	12.6 ppg
Bridging pill		
Bridging pill		
CEMENT	25 bbl	15.5 ppg

PBL