

FORM-A-BLOK AS Pill Completely Stops Dynamic Fluid Losses, Mumbai High

Acid-soluble lost circulation pill stops losses in highly fractured, porous reservoir

CHALLENGE

- Mitigate total losses in highly fractured, porous formation.

SOLUTION

- Use the FORM-A-BLOK AS* acid-soluble lost circulation pill to mitigate losses.

RESULTS

- Completely stopped and prevented further losses at 250 galUS/min [0.95 m³/min] flow rate.

“While drilling the well, total subsurface losses and severe dynamic losses were observed simultaneously. These were resolved with the successful implementation of FORM-A-BLOK AS pills.”

Company Man



Mitigate losses in highly fractured reservoir

The primary oil reservoir of the Mumbai High field is fractured limestone that has been severely depleted since the field was discovered in 1974, making heavy-to-total fluid losses common in this area.

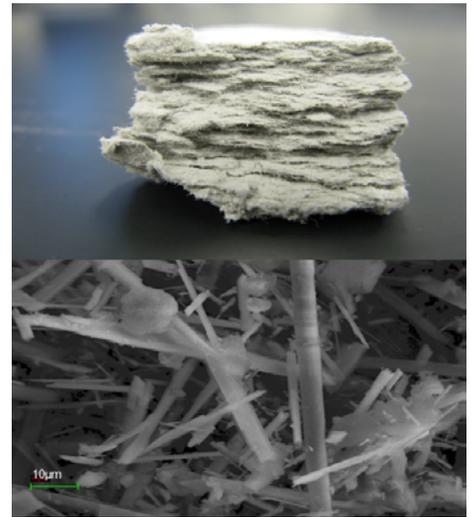
An operator needed to drill an 8½-in HPHT exploratory well near this reservoir. Kicks and partial losses were observed within in the 4.6 ft [1.4 m] between 8,071.85- and 8,076.44-ft [2,460.3- and 2,461.7-m] MD. In the second run, the operator experienced total losses, with a final dynamic loss rate of 80 bbl/h [12.72 m³/h] at 322 galUS/min [1.22 m³/min] and static losses at 0.5 bbl/h [0.08 m³/h]. The operator needed a way to prevent these losses before continuing.

Use an acid-soluble lost circulation pill to curb losses

After noting the success that the FORM-A-BLOK AS pill had when used previously in wells in the area, M-I SWACO, a Schlumberger company, proposed using the same pill to curb the losses. To make 100 bbl [15.89 m³] of a 15.8-lbm/galUS [1,893.26-kg/m³] pill, 35 lbm/bbl [100 kg/m³] FORM-A-BLOK AS pill was added to drill water.

Reduced dynamic losses to zero

After pumping the FORM-A-BLOK AS pill, dynamic losses were eliminated at 250 galUS/min [0.95 m³/min], and the pill was accepted by the operator as a successful solution.



The plug created by the FORM-A-BLOK AS pill is porous enough to allow the slurry to defluidize, yet still prevent the mud from passing through.



The FORM-A-BLOK AS pill forms a plug while defluidizing through porous formations, preventing losses.