**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

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**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 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.

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*Mark of M-I L.L.C., a Schlumberger company

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