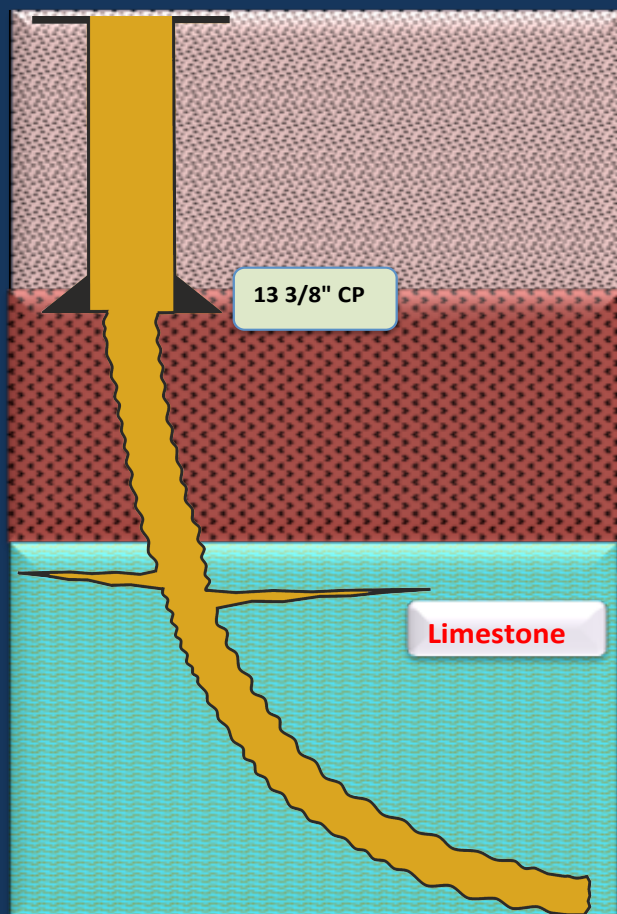


## FRACSEAL PROTECTS PROBLEMATIC "STUPA CARBONATES" & ELIMINATES SEVERE LOSSES Offshore Mahakam Indonesia



### The Challenge

South Mahakam present high risk for Severe losses due to Carbonate's presence is all over the well interval from surface to 2500 m. **Severe to Total loss is highly potential** in the 12¼" section in the **Near Beta (±1,363 m)** and **Top Stupa (±1,957 m)** Carbonates formations. **Stupa Carbonates** is the most problematic for severe /total losses amongst the two infamous sections.

### The Action

The Operator set up 3 scenarios of LCM spotting pill formulation for drilling through the predicted loss zones. Once started drilling 12¼" hole from 1,286 m, the KCl Polymer active mud was treated with **15-20 kg/m<sup>3</sup> FRACSEAL® Fine** and **15-20 kg/m<sup>3</sup> CaCO<sub>3</sub> M.** Added **80 sacks FRACSEAL** before entering **Stupa Carbonates**. In the anticipation of Total loss, 100 bbl of **50 ppb STOPLOSS** pill was prepared in Hallib. batch mixer tanks.

### The Result

**Had no losses** drilling passed thru the **Near Beta** until 1,563 m. The Stupa Carbonates was also drilled **with no loss of circulation** observed and **hole was stable**. STOPLOSS pill prepared in batch mixer tanks was not required. The pill was kept and remained stable with no degradation after 2 months in the tanks.