

ROCKBLOCK® 3 LCM Solves Lost Circulation Challenge in the Permian

North America

CHALLENGE:

- ▶ OBM losses at a rate of 30-40 barrels per hour to the fractured Spraberry formation
- ▶ Well ballooning while making connections
- ▶ Excessive NPT

SOLUTION:

- ▶ ROCKBLOCK 3 LCM pill was pumped at 20 lb/bbl in 30bbls of OBM
- ▶ A second ROCKBLOCK 3 LCM pill was pumped consisting of 40lb/bbl in 40bbls

RESULT:

- ▶ ROCKBLOCK 3 sealed the fractured formation and eliminated OBM losses and wellbore ballooning
- ▶ Achieved TD and successfully cement casing on bottom
- ▶ Continued use of this formulation when drilling in this region

CHALLENGE

While drilling in the lateral section of well in Howard County, Texas, an operator experienced oil-based mud (OBM) losses at a rate of 30-40 barrels per hour. The losses were occurring in the fractured Spraberry formation directly above the Wolfcamp formation. The well started ballooning while making connections which led to excessive non-productive time (NPT) and potential well control issues.

SOLUTION

The operator pumped a ROCKBLOCK 3 LCM pill at 20 lb/bbl in 30bbls of OBM. As the pill crossed the thief zone the losses decreased. A second ROCKBLOCK 3 LCM pill consisting of 40lb/bbl in 40bbls was pumped and as the pill crossed the thief zone, the annular pressure increased and full returns were achieved. The well was drilled to total depth (TD) with no further lost circulation or ballooning events.

RESULT

ROCKBLOCK 3 sealed the fractured formation and eliminated OBM losses and wellbore ballooning. This allowed the operator to drill to TD and successfully cement casing on bottom. The operator described the product as successful in stopping the losses to the troublesome formation. The operator will continue to use this formulation when drilling in this region.

