



## Baroid Lost Circulation Materials

### BaraShield®-664 lost circulation material (LCM) helps operator drill through severe loss zone, saves USD 227,000 and 2 1/2 days

Total mud loss volume reduced by 81% and no lost circulation events occurred

Location: Williston, North Dakota

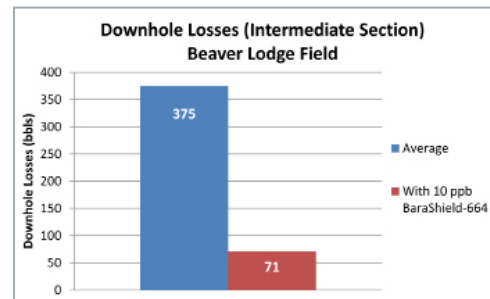
#### Overview

An operator drilling in the Beaver Lodge field was experiencing severe mud losses in the Rival formation. Severe lost circulation was a significant problem even on previous wells drilled in this field.

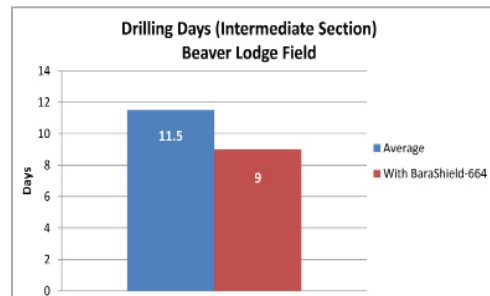
#### BaraShield®-664 LCM prevented lost circulation events, saved rig time and costs

The Baroid team recommended treating the active mud system with 10 ppb of BaraShield®-664 LCM, prior to drilling into the Rival formation. The proprietary particle formulation of BaraShield-664 LCM is designed to quickly seal a wide range of fractures. The shakers were screened down to API 20 mesh to prevent screening out some of the LCM particles. Though immediate mud losses were observed upon drilling into the Rival formation, the BaraShield-664 LCM treatment effectively sealed the problem areas fast and the losses quickly subsided. Only an insignificant amount of seepage was experienced while drilling through the Rival formation. The BaraShield-664 LCM treatment prevented any lost circulation events from occurring throughout the drilling process.

The operator experienced only minimal seepage, and the section was drilled 2 1/2 days faster than the average for this area, which resulted in a savings of approximately USD 200,000 in rig time. The total mud loss volume was reduced by 81% when compared to previous wells, resulting in a USD 27,000 savings in mud costs. Overall, the operator realized a savings of USD 227,000.



Downhole losses decreased significantly after using BaraShield-664 LCM



The operator saved 2 1/2 days of drilling time after using BaraShield-664 LCM

CHALLENGE	SOLUTION	RESULT
Solving the severe, costly lost circulation issues in the Rival formation.	Treating the active mud system with 10 ppb of BaraShield®-664 particulate LCM prior to drilling the Rival formation.	The mud loss was reduced by 81% compared to previous wells, and the operator also saved 2 1/2 days of rig time.