PRODUCT BULLETIN

NewBridge™ (M,C)

LOST CIRCULATION MATERIAL

NEWPARK DRILLING FLUIDS
www.newparkdf.com

PRODUCT DESCRIPTION

NewBridge™ lost circulation material (LCM) is a blend of granular and fibrous materials, offered in medium and coarse grades. It is used as a bridging and meshing agent when added to X-Prima™ high fluid loss squeeze or similar high-solids, high fluid loss squeeze slurries used in the remediation of a wide range of lost circulation.

BENEFITS

NewBridge LCM is available in medium and course grades. When blended together, the two grades mesh across a wide range of openings in the formation, promoting lost circulation remediation.

APPLICATION

When added to a squeeze slurry and injected into a fractured or vugular formation, the granular particles in NewBridge LCM become lodged in the throat of the loss zone. There, they act as anchor points around which the fibrous material and finer solids accumulate and form an immovable plug matrix.

TREATMENT RECOMMENDATION

Prior to pumping any slurry containing either the medium or coarse grade of NewBridge LCM, it is important to ensure that trash screens and, if possible, pump suctions have been removed from drill pipe.

NewBridge Medium

If MWD tools or the mud motor are in use, or if the bit jets are smaller than $^{10}/_{32}$", limit additions of NewBridge Medium (M) to 2-4 lb/bbl to the squeeze slurry following weight-up. If no sensitive tools are in use and bit jets are greater than $^{10}/_{32}$", 5-8 lb/bbl are recommended. If the drill string is open-ended and slurry viscosity allows, add 10 lb/bbl or more.

NewBridge Coarse

NewBridge Coarse (C) is used in extreme cases of lost circulation, in fracture cases or when vugular openings are estimated to be greater than 1 $^{1}/_{2}$-2". To extend the particle size range, NewBridge Medium (M) should be added to the slurry in conjunction with NewBridge C at a 1:1 ratio. Depending on jet sizes, the combined concentration of these additives should not exceed 10 lb/bbl unless the drill string is open-ended or a ported bypass sub is in use.

NOTE: The most important aspect of combating lost circulation is particle size distribution. Consequently, it is recommended that a combination of materials be added to ensure a good particle size distribution (PSD).

PARTICLE SIZE DISTRIBUTION

	Medium	Coarse
Retained on 4 Mesh	4%	21%
Retained on 6 Mesh	6%	27%
Retained on 10 Mesh	33%	16%
Retained on 20 Mesh	45%	27%
Retained on 40 Mesh	6%	5%
Passing 40 Mesh	n/a	4%
Retained on 80 Mesh	4%	n/a
Passing 80 Mesh	2%	n/a

TYPICAL PHYSICAL PROPERTIES

Appearance..... Brown fiber, light-colored granules

Flash Point..... N/A

Solubility in Water..... N/A

Specific Gravity..... 1.3-1.5

HANDLING AND STORAGE

Minimize exposure to dust. Store in a dry area. Use appropriate hygiene, clothing and personal protective equipment suitable for work being done. Review the SDS thoroughly before using this product.

PACKAGING

NewBridge LCM is available in 25-pound (11.3-kilogram) multi-walled bags.