**BaraBlend®-665**
Lost Circulation Material

*Premium Granular, High-fluid Loss LCM Contains Fine-sized Reticulated Foam*

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**CHALLENGE**

Lost circulation continues to be one of the most prevalent operational issues today and is a leading contributor to drilling non-productive time. The solutions used to cure lost circulation are optimized according to the formation types, drilling fluid loss rates and fluid deployment. Not all lost circulation events can be prevented and often require the use of specialty applications, provided in the form of a lost circulation “pill.” Once a lost circulation incident occurs, it is essential to apply the appropriate fluid solution as quickly as possible to minimize non-productive time and maximize wellbore value.

**OVERVIEW**

Halliburton Baroid’s BaraBlend®-665 lost circulation material (LCM) is an innovative, “Engineered, Composite Solution” to help reduce or stop lost circulation encountered from natural or induced fractures. The pre-defined particulate and foam composition in a single-sack effectively remediates partial to severe fluid losses in any formation, including unconsolidated sand or gravel formations, rubble zones and naturally fractured formations. With the unique composition of BaraBlend-665 LCM, operators can increase wellbore integrity, reduce operating costs and minimize drilling non-productive time.

**APPLICATIONS**

BaraBlend-665 LCM can be used for partial to severe loss remediation when applied in aqueous or non-aqueous base fluids. It should not be mixed in the drilling fluid since fluid loss materials that are present have a detrimental effect on the high fluid loss efficiency. BaraBlend-665 LCM is suitable for all well types in any location.

For severe to total loss scenarios and when encountering large fractures, adding Baroid’s unique BaraLock®-665.M and BaraLock-666.C reticulated foam LCMs to BaraShield-665 LCM has been proven in the lab to plug fractures as wide as 9,800 microns.

**FEATURES**

» Composition comprised of both fine foam sponges and multi-modal particulates in a single sack
» Proven in lab to seal openings up to 3,000 microns (<3mm)
» Effective as a remediation treatment
» Material can be pumped through typical BHAs or used in open-end drill pipe
» No specialized pumping equipment required

**BENEFITS**

» Maintain wellbore integrity
» Reduced non-productive time
» Reduced costs
» Increased rig-floor efficiency
» Reduced HSE incidents
Laboratory data presented in table below demonstrate that by supplementing BaraBlend-665 LCM with BaraLock-666.M and BaraLock-666.C LCMs, plugging can be extended to slots as wide as 9,800 microns.

<table>
<thead>
<tr>
<th>Slot, microns</th>
<th>Combination that Plugged the Slot</th>
<th>Maximum Pressure, psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000</td>
<td>100 ppb BaraBlend-665 LCM</td>
<td>4,000</td>
</tr>
<tr>
<td>4,000</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>5,000</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>6,000</td>
<td>100 ppb BaraBlend-665 + 0.25 ppb BaraLock-666.M LCM</td>
<td>4,000</td>
</tr>
<tr>
<td>7,000</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>8,000</td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td>9,000</td>
<td>100 ppb BaraBlend-665 + 0.5 ppb BaraLock-666.M LCM + 0.5 ppb BaraLock-666.C LCM</td>
<td>4,000</td>
</tr>
<tr>
<td>9,800</td>
<td>120 ppb BaraBlend-665 + 0.5 ppb BaraLock-666.M LCM + 1 ppb BaraLock-666.C LCM</td>
<td>4,000</td>
</tr>
</tbody>
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