**IntegraGuard™ Multi**

**CEMENT SPACER SYSTEMS**

**APPLICATIONS**
- Non-aqueous drilling fluids recovery
- Primary cementing
- Oil and gas wells
- Vertical, deviated and horizontal wells

**FEATURES & BENEFITS**
- Cost-effective recovery of high volumes of non-aqueous drilling fluids
- Enhanced zonal isolation and wellbore integrity
- Improved wellbore stabilization and reduced casing corrosion
- Engineered to match wellbore conditions
- Prepared and pumped with conventional cementing equipment

**OVERVIEW**

IntegraGuard Multi effectively and economically recovers high volumes of oil- and synthetic-based drilling fluids during primary cementing operations. This innovative pozzolanic scavenger spacer is pumped ahead of the cement slurry in sufficient volume to displace the drilling mud to the surface. The drilling mud can then be reused or reprocessed. Considering the high value of these muds, this recycling capability can lead to a significant reduction in the overall well cost.

The density and viscosity of IntegraGuard Multi spacer systems are engineered to provide the required fluid stability, friction pressure and density hierarchy for well control and fluid displacement. Set times of the systems are adjusted to ensure adequate placement time. Fluid compatibility and wellbore conditioning are further enhanced by preceding IntegraGuard Multi spacer with conventional water-based spacer.

**TYPICAL PROPERTIES**

<table>
<thead>
<tr>
<th>TYPICAL DENSITY RANGE</th>
<th>8.3 to 14.0 ppg</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPICAL TEMPERATURE RANGE</td>
<td>Up to 300°F BHCT</td>
</tr>
</tbody>
</table>