

#### RECOMMENDATIONS

A 100 bbl slurry should be pumped at thief zone. Fill backside with water. Close BOPs and begin applying soft squeeze at 50 psi up to 250 psi and hold for 4 to 6 hours

A fluid technician is available to assist in specific recommendations based on actual hole conditions. The key factors to obtaining a successful Quick-Squeeze™:

First, a slurry with an extremely high solids content and high fluid loss must be prepared. Second, the slurry must be placed at the proper location in the wellbore.

Tables are provided for typical formulations of 1 bbl of Quick-Squeeze™ slurry. If saturated saltwater is used, barite should be decreased by 0.6 sacks per barrel.

Due to variations in base oils and synthetic base oils and the effects on barite, pilot testing is highly recommended to determine precise formulations. Slurries that become to thick should have up to 1.0 bbl of of wetting agent added to aid in thinning the slurry.

## **BENEFITS**

Fastest mix times in the industry. Cures complete loss circulation. Replaces costly cement squeezes. Will not harden in the drill string. Can be used in Water, Oil and Synthetic Muds. Prevents sidetracking of wellbore.

No additional LCM's required. Works with conventional rig mixing and pumping equipment. If needed, can be cleaned up through economical alkaline treatments.

# **QUICK-SQUEEZE**<sup>™</sup>

### **GENERAL INFORMATION**

Our Quick-Squeeze™ has been developed as an improved solution for severe to complete loss of returns. Quick-Squeeze™ incorporates our newest "Quick2Mix™" technology during the manufacturing process. Quick-Squeeze™ has been specifically developed to mix on site up to twice as fast as our best selling premium products which already mix faster than our competitions premium squeeze products. The Quick-Squeeze™ unique chemistry will produce a hardenable slurry designed to be squeezed into down-hole loss zones. The high fluid loss and high solids content properties of the slurry combined with the large particle size distribution of the bridging and sealing materials in Quick-Squeeze<sup>™</sup> quickly form a solid plug allowing wellbore returns to be established and to remain throughout extended drilling operations. Quick- Squeeze™ may be utilized in Water-based, Oil-based and Synthetic-based fluid systems, pilot testing is recommended to ensure compatibility. A typical 100 pumpable barrel application can be prepared on-site utilizing conventional rig mixing equipment in less than 2 hours. A soft squeeze should be held at 50-250 psi for 4-6 hours. Quick-Squeeze<sup>™</sup> may cause contamination of the drilling fluid and when necessary can be cleaned up by means of conventional high alkaline treatments. Quick-Squeeze<sup>™</sup> seals are capable of withstanding swab and surge pressures incurred during normal drilling and pipe tripping operations. No additional products are required. No special mixing equipment is required. Quick-Squeeze™ provides a quick, effective and economical response to severe loss circulation events.

#### **TYPICAL PROPERTIES**

| Composition              | 1 | Wide range of g   | aded par | ticles, bridgi | ing and se | aling agent |
|--------------------------|---|-------------------|----------|----------------|------------|-------------|
| Form                     | 1 | Powder            |          |                |            |             |
| Color                    | 1 | Gray to White     |          |                |            |             |
| Bulk Density (lb/cu. ft) | : | Compacted         | 20-35    |                |            |             |
|                          |   | Uncompacted       | 10-25    |                |            |             |
| рН                       | : | 11.5-12.8         |          |                |            |             |
| Solubility:              | : | Partially soluble | in water |                |            |             |
|                          |   |                   |          |                |            |             |
|                          |   |                   |          |                |            |             |

PACKAGING

Quick-Squeeze is packaged in 25 lb. Kraft paper bags, 50 bags per pallet. Special packaging requirements will be quoted upon request.

#### PRECAUTIONS

See the Safety Data Sheet for more detailed information concerning storage, handling, transportation, disposal and safety requirements.

#### 1.0 BBL FORMULATION TABLE FRESH AND SEA WATER FLUIDS

| Density<br>Ib/gal | pounds of<br>Quick-Squeeze™ | sacks of barite | bbls of Water,<br>Fresh or Sea |
|-------------------|-----------------------------|-----------------|--------------------------------|
| 9                 | 60                          | 0.0             | 0.93                           |
| 10                | 60                          | 0.6             | 0.89                           |
| 11                | 58                          | 1.2             | 0.86                           |
| 12                | 50                          | 1.8             | 0.82                           |
| 13                | 48                          | 2.3             | 0.79                           |
| 14                | 43                          | 2.9             | 0.76                           |
| 15                | 38                          | 3.5             | 0.72                           |
| 16                | 35                          | 4.0             | 0.69                           |
| 17                | 30                          | 4.6             | 0.66                           |
| 18                | 28                          | 5.2             | 0.62                           |
| 19                | 23                          | 5.8             | 0.59                           |

#### 1.0 BBL FORMULATION TABLE OIL AND SYNTHETIC BASE FLUIDS

| Density<br>Ib/gal | pounds of<br>Quick-Squeeze™ | sacks of barite | bbls of Water,<br>Fresh or Sea |
|-------------------|-----------------------------|-----------------|--------------------------------|
| 8                 | 55                          | 0.0             | 0.880                          |
| 9                 | 50                          | 0.0             | 0.855                          |
| 10                | 48                          | 1.2             | 0.830                          |
| 11                | 43                          | 1.8             | 0.805                          |
| 12                | 40                          | 2.3             | 0.770                          |
| 13                | 38                          | 2.9             | 0.745                          |
| 14                | 33                          | 3.5             | 0.720                          |
| 15                | 30                          | 4.0             | 0.695                          |
| 16                | 28                          | 4.6             | 0.670                          |
| 17                | 25                          | 5.2             | 0.645                          |
| 18                | 20                          | 5.8             | 0.610                          |

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