HYDRO-PLUG® NS lost circulation material is a combination LCM that contains a natural polymer component that hydrates to form a pliable treatment. This polymer is highly biodegradable and meets requirements for use in the North Sea. HYDRO-PLUG® NS lost circulation material is a simpler system, and is far less reliant on knowing the application temperature than one that chemically cross-links. HYDRO-PLUG NS lost circulation material is a combination of resilient graphitic carbon and other sized components including the hydrating polymer that absorbs large amounts of water when it hydrates, increasing both volume and viscosity. Incorporating this material along with engineered combinations of our resilient graphitic carbon and other materials creates a hybrid chemical/particulate treatment.

Applications / Functions

- HYDRO-PLUG NS lost circulation material will work with all types of water-based and oil-based drilling fluids but must be mixed in fresh water. HYDRO-PLUG NS material is ideal for use in deep water operations where synthetic base drilling fluids are in use.

Advantages

- Mix and pump without costly trips
- Quick-acting sealant for vugular, fractured formations and severe loss zones
- Rapid mixing through standard hopper
- One-sack product provides compact storage; each pallet of HYDRO-PLUG NS lost circulation material makes a 25-bbl pill
- No special equipment is required to place the pill, just the rig pump

Typical Properties

- Appearance: Mixture of dark gray to black granules and flakes
- Specific gravity: 2

Recommended Treatment

For normal treatment, add 45 bbls of freshwater (freshwater only) to a clean pit. Add 80 50-lb bags of HYDRO-PLUG NS lost circulation material. Do not add CAUSTIC or LIME. Spot the mixture across the loss zone and perform a gentle squeeze (if possible). Do not add directly to active system. Note: A 90 to 120 minute window is required to mix, pump and squeeze. No special equipment is required to pump the pill. Just use the rig pump.

Packaging

HYDRO-PLUG NS lost circulation material is packaged in 50-lb (22.7-kg) bags