



enventives

VEN-PEL II™

RECOMMENDATIONS

Use Ven-Pel II™ to prevent or overcome severe lost circulation (water-based drilling fluid)

Specifically designed to disintegrate and form fibrous particles when in contact with water.

If disintegrated on the surface, Ven-Pel II™ acts like conventional LCM where it will disperse to form a concentrated slugging pill (ie. nut hulls, mica, wood fibers, can fibers, and multi component blended products).

Pretreatment Concentration: varies between 5 and 40 lb/bbl. Slugs Concentration: higher concentration, if desired. In water-based drilling fluid, Ven-Pel II™ acts the same way as conventional non-desified fibrous LCM where it will not react with conventional mud systems.

Ordinary precautions should be taken to see that Ven-Pel II™ fully disintegrated and uniformly mixed when pumping downhole through jet bits to prevent bits from plugging.

It can be added to a system through conventional jet mud mixing equipment. Severe Lost Circulation: Ven-Pel II™ can be displaced in pellets form through open-ended drill pipe and place in or near proximity to loss zone which aide in the bridging and expansion of pellets.

Care must be taken to not allow pellets to bridge in drill pipe.

The use of diesel oil or other non-aqueous carriers to form a slurry of Ven-Pel II™ will prevent disintegration of pellets until they have been placed in the thief zone.

Zones that are over flushed with water or water-based drilling fluids will cause pellets to swell and seal.

GENERAL INFORMATION

Ven-Pel II™ is used in water-base drilling fluids to prevent or overcome lost circulation. It is ideally suited for use in porous gravel, fractured formations, and vugular cavernous strata.

Ven-Pel II™ is a densified, fibrous, lost circulation material designed to expand up to five times or more its volume when brought into contact with water. Even without expanding, the controlled pellet size will provide initial high water loss bridging properties in large void spaces. However, once in avoid space and contacted with water, the pellets will expand will produce a fibrous end product. In addition, the ultimate expansion and disintegration of the pellets provides a secondary plugging mechanism; the development of a wide particle size range of many small, pliable fibers.

This results in the formation of a tight mat-like seal. Because of the physical configuration of Ven-Pel II™, coupled with the fact that it is fibrous and will expand like clay, it can be used like a conventional lost circulation material for pretreatment or for pills, or it can be used as high water loss squeezes. In addition, it can be slurried in a nonaqueous carrier like diesel oil, pumped into the loss zone, and allowed to swell and set up on contact with water.

Due to its chemical and physical nature, Ven-Pel II™ can be used to span the spectrum of many of the conventional lost circulation products and techniques on the market today.



enventives

VEN-PEL II™

RECOMMENDATIONS

Precautions must be taken to prevent premature bridging or expanding of Ven-Pel II™ during displacement.

Drill-pipe plugging, plug can be removed with highpressure water jets or conventional cement removal equipment. Although chemical treatment for plugging can help, mechanical removal is less expensive and time consuming.

Ven-Pel II™ can be use with other loss circulation products (ie. mica, nut hulls, cellophane, polymer pills, etc.). Ven-Pel II™ should be considered a substitute or replacement for some asbestos/DE type products.

Ven-Pel II™ can be use as a reinforcement agent in salt gel squeezes, barite plugs, high water loss slurries, gum squeezes, gel/cement squeezes, polymer plugs, and conventional squeezes.

Major cause of LCM failures is not knowing the exact location of the loss zone. It is recommended that sufficient dollars and time spent to identify and isolate the point of loss in order to minimize excessive expenditures of time and dollars on LCM.

Ven-Pel II™ is not a "cure all" product. It will not solve all lost circulation problems and no claims are made for such. It does not have strength of walnut hulls nor non-water reactive properties of mica.

Ven-Pel II™ will provide above average success ratios when compared to other fibrous type lost circulation product if it is used by the recommended methods and can be placed in the loss zone.

PACKAGING

Ven-Pel II™ is packaged in 25 lb, three-ply Kraft paper bags.

TYPICAL PROPERTIES

| | |
|-----------------------|---|
| Composition | : Primarily long & short cellulose base fibers |
| Color | : Light Brown |
| Form | : Pellets |
| Diameter | : 5/16 inch |
| Size, Length | : Less than 1 inch |
| Bulk Density (lb/ft3) | : compacted: 39-43 uncompacted: 38-42 |
| Swelling Volume | : Minimum 5 times original volume in fresh water at ambient temperature |
| Solubility, water | : Dispersible in water |
| Solubility, oil | : Insoluble in nonaqueous solvents |

PRECAUTIONS

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