New HI-M-PACT™ Low-Dosage Hydrate Inhibitor - Step Improvement in Deepwater Flow Assurance

SUGAR LAND, Texas (May 31, 2002) - Baker Petrolite introduces the HI-M-PACT™ low-dosage hydrate inhibitors (LDHI) to help deepwater oil and gas operators inhibit hydrate plugging, reduce costs and increase hydrocarbon recovery. In field applications, the low-dosage HI-M-PACT inhibitors have achieved significant total cost savings in production systems designed for conventional methanol treatment.

Hydrates are ice-like crystalline structures that form in deepwater systems through the combination of light hydrocarbons and water under low seabed temperatures and high reservoir pressures.

Hydrate plugs have formed as long as 2,000 ft (610 m) and have blocked pipelines as large as 40” (1 m) in diameter. The cost of remediating hydrate plugging can be extremely high in subsea lines that stretch as long as 60 miles (97 km).

Based on anti-agglomerant technology, these low-dosage HI-M-PACT inhibitors disperse hydrates into the liquid hydrocarbons. Dosage rates are typically 1/40th that of conventional inhibitors. With the HI-M-PACT anti-agglomerant inhibitor, total costs for existing production systems are expected to be cut by as much as 50%. The greatest savings are expected in the design of new production systems through the use of narrower treatment flow lines, reduction of premium deck space for treatment storage tanks and incremental hydrocarbon recovery.

In a deepwater Gulf of Mexico field, methanol injection at the maximum rate was insufficient to control hydrates in 24-mile gas condensate flow lines,” explained Hartley Downs, Director of Fluids Conditioning for Baker Petrolite. “The HI-M-PACT inhibitor at a low dosage of 0.35 gal/bbl of water increased production by 20 MMcfd. Increased capacity afforded by the HI-M-PACT treatment is expected to allow the recovery of additional 7.5 Bcf in hydrocarbon reserves.”