

TECHNICAL BULLETIN ON MILITEC-1® IN A SPEED REDUCER

September 22, 1992

This report comes from Jade Energy Inc. of Williamson, West Virginia. The company used Militec-1 in a Falk Speed Reducer that is about 15 years old and has been used by Jade for the past 5 years. It was last rebuilt in 1991.

Operational Information:

This speed reducer is rated for a 150-hp motor, but is powered by a 200-hp motor and is therefore overloaded. It operates a 3,300-foot belt line which has a 42-inch width and moves coal and "reject" (rock). While tons-per-hour data was not available, the load is considered heavy. The speed reducer is generally operated 24 hours per day, 6 days a week.

The speed reducer has been lubricated with 7 gallons of a 90-weight GL-5 gear oil which incorporates an extreme pressure additive. Militec-1 was added to this base oil.

Historically, the speed reducer has consistently operated with an oil temperature of 165°F and has had a current draw of 150 amperes.

Results Using Militec-1:

In late March, 1992, 5 pints of Militec-1 were added to the 7 gallons (an 8.9% mixture). The following results have been consistent over the past 25 weeks, during which there were several shutdowns for 3 to 4 days when belt operation was not needed. The speed reducer has therefore been in operation with Militec-1 for approximately 3,000 hours. There have been no oil changes, nor repair work on the speed reducer during this period.

With Militec-1, the current draw was 141 amps, a reduction of 9 amps over the pre-Militec-1 period. This equates to a 6% reduction.

With Militec-1, the temperature was 145°F, a reduction of 20°F over the pre-Militec-1 period. This equates to a 12% reduction.