

Mining: Eliminating Solenoid Sticking

QUINTOLUBRIC® 814-01

The Challenge

Bridger requires their longwall hydraulic fluid to provide high performance characteristics that comply not only with O.E.M. warranty requirements, but also their own high quality standards, they wanted a longwall fluid to:

- Keep their systems problem free
- Keep roof supports and pumps trouble free
- Reduce solenoid valve replacements

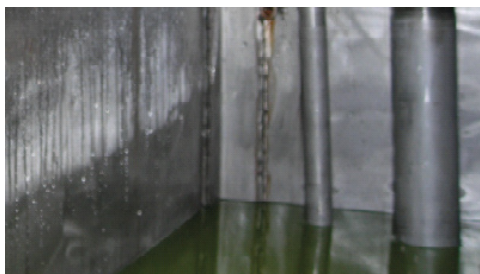
Quaker Houghton proposed using QUINTOLUBRIC® 814-01 in their systems and providing engineering support for their mixing system to meet the required performance standards and reduce maintenance requirements.

The Solution

Since selecting QUINTOLUBRIC® 814-01 Bridger Coal has achieved the following:

- No valve or other hydraulic problems on Bucyrus Longwall, Hauhinc pumps and other related equipment
- Elimination of solenoid sticking and other hydraulic failures
- Reduced solenoid valve replacement since installation
- Less than 12 solenoid valves needed to be replaced since QUINTOLUBRIC® 814-01 was put into service
- Replacements were due to electrical malfunctions and not problems with QUINTOLUBRIC® 814-01

Quaker Houghton also provided an engineering solution for Bridger's mixing system, which was producing low mix ratios. Quaker Houghton was able to identify and fix the problem. Even at low mix concentrations, QUINTOLUBRIC® 814-01 did not separate, scum or show signs of bacterial growth.



Inside the mix tank at Bridger Coal.

The Benefits

Quaker Houghton's QUINTOLUBRIC® Longwall Fluids offer these seven major benefits:

- Biodegradable
- No bacteria scum
- No corrosion
- Non-toxic
- Non-hazardous
- Fire resistant
- Odor free

The Product

HFA fluids are hydraulic fluids for use in equipment designed to operate with low-viscosity high water content fluids. QUINTOLUBRIC® 814-01 is a high water based (HFA) hydraulic fluid concentrate designed for use in longwall shields.

Quaker Houghton markets several HFA products for various applications including the brand names QUINTOLUBRIC® 807 for commercial applications, and QUINTOLUBRIC® 814 and QUINTOLUBRIC® 818 for longwall mining applications. These products outperform competitive products in stability, bio-resistance and corrosion prevention with low applied costs.