

Mining: Reducing Solenoid Consumption by 80%

QUINTOLUBRIC® 814-02

The Challenge

Massey Energy works to achieve the highest level of efficiency and safety in their longwall operations. Part of achieving efficient and safe operations is selecting a hydraulic fluid that provides:

- Lubrication of pumps, cylinders and valves
- Effective filtering to remove contaminant particles and dirt
- Reduced growth of bacteria and fungi in the working fluid

Massey requires the hydraulic fluid to provide exceptionally high performance characteristics by exhibiting the following:

- Low toxicity and biodegradability to improve health and safety
- Product stability to allow numerous cycles

Quaker Houghton wanted to show that QUINTOLUBRIC® 814-02 could not only meet these requirements but also reduce costs through increased productivity and reduced downtime and maintenance requirements.

The Solution

Since selecting QUINTOLUBRIC® 814-02 Massey has seen dramatic improvements in the following areas:

- Reduction in fluid maintenance
- Increase in longwall operation
- Increase in the mine's profitability

Since switching to QUINTOLUBRIC® 814-02 they have achieved the following results:

- More than 80% reduction in solenoid consumption
- Improved operational efficiency
- Reduction in solenoid changes during a shift
- Increased savings from reductions in solenoid purchases

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® 814-02 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 out-perform competitive products in stability, bio-resistance and corrosion prevention with low applied costs.



Before: Solenoid after 90 days use with previous fluid



After: Solenoid after 90 days use of QUINTOLUBRIC® 814-02

