

## Magnetic Filtration Case Study



## Marion Dragline

BMA Open Cut Coal Mine  
Queensland, Australia

August 2008

**APPLICATION:** No. 2 Gear Box  
DRE 38 Drag Line

**PROBLEM:** Increasing levels of ferrous contamination.

**SOLUTION:** Install an OEI Magnetic Scrubber (5SC24SCL) to the existing kidney loop filtration system (see Photo B)

**RESULTS:** After three days of operation, the OEI magnetic filter was removed revealing a significant amount of ferrous contamination that had been extracted from the gear oil (see Photo C). Laboratory report showed a sizeable reduction in Particle Quantity count from 3904 to 723.

Tim Rantin (Flac Champion) of BMA mines concluded the contaminants removed by the OEI Magnetic Filter are particles the existing filtration system was unable to capture. These particles will prematurely wear out the gear box components and seals in addition to degrading the fluid.

The OEI magnetic filter is easily cleaned and the trapped contamination analyzed for component wear identification allowing predictive maintenance planning. For further information contact our office or visit our website

[www.OneEyeIndustries.com](http://www.OneEyeIndustries.com).

