

## Magnetic Filtration Case Study



## BHP, Billiton Mitsubishi Alliance Blackwater Mine

Blackwater Queensland, Australia

July 2008

**APPLICATION:** 789B Haul Truck TKD6088  
Coolant System

**PROBLEM:** Ferrous contamination in engine  
coolant fluids

**SOLUTION:** Installation of OEI Magnetic Y-  
Strainer (5YB1TX) on secondary coolant line  
(see Photo A)

**RESULTS:** After 500 hours of engine operation,  
the OEI magnetic filter was removed revealing a  
substantial amount of ferrous metal that had  
been extracted from the coolant fluid (see Photo  
B). If left circulating in the coolant fluid, these  
metal particles will prematurely wear out cooling  
system components such as the water pump,  
radiator and seals in addition to degrading the  
fluid.

Tim Rantin (Flac Champion) of BMA mines has  
been using OEI's technology since 2007 and has  
found OEI products to be significant contributors  
in reducing contamination and operating costs.  
This installation was performed with little  
alteration and labor to the current machinery yet  
yielded considerable results.

The OEI magnetic filter is easily cleaned  
enabling analysis of trapped contamination for  
component wear identification and aiding in  
predictive maintenance planning. For further  
information contact our office or visit our website  
[www.OneEyeIndustries.com](http://www.OneEyeIndustries.com).