

Case Study: Gear Oil Magnetic Filtration



Photo A

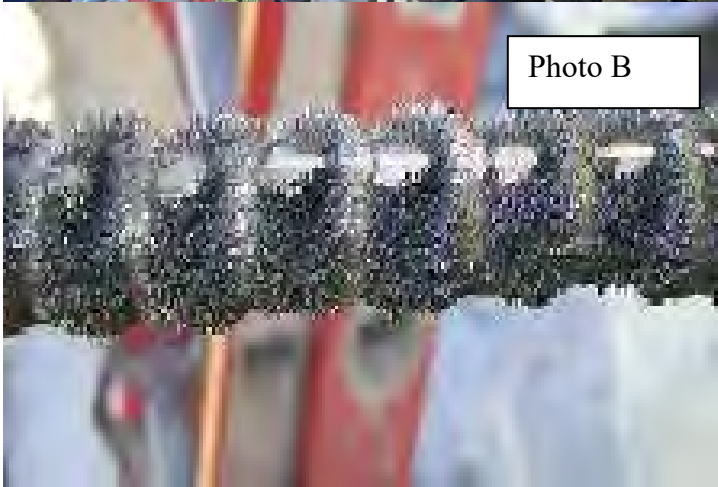


Photo B

Bucyrus Erie 49R III Rotary Drill Kennecott Utah Copper Magna, Utah

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APPLICATION: Rotary Gear Case Filtration

PROBLEM: No filtration and increasing levels of ferrous contamination (oil analysis) suspended in the oil. When the gear oil is replaced the fine metal contamination adheres to the gears and walls of the gear case.

Left in the gear lube oil fluid these metal particles will prematurely wear the components and degrade the fluid viscosity.

SOLUTION: Installation of an OEI Magnetic Filter (2RNPT112ES) in the optimum splash area of the rotary gear case.

RESULTS: (Photo's A & B) After 3 weeks of operation the magnetic filter was removed and a significant amount of ferrous metal was trapped on the magnetic filter rod. This contamination is filtered from the oil down to submicron levels thereby reducing premature wear, extending the oil life planning and the gear box component life. This will result in increased operational time improving production.

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