

Magnetic Filtration Case Study March 2007



Clemro 500 New Gravel Crusher LaFarge Cement and Gravel Quarry

Edmonton, Alberta, Canada

APPLICATION: Hydraulic Filtration for a Gravel Crusher

PROBLEM: Ferrous Contamination during start up

When purchasing a new gravel crusher, maximizing the operational longevity of the equipment is very important. To protect the hydraulic system from premature failure is a very important aspect with the operational management. Ferrous metal under 10 microns in size is the most damaging contaminant in a closed hydraulic system and traditional filtration is unable to remove it.

SOLUTION: Dave Hall the owner of Tri-Dave Gravel Sales was well aware of this problem and requested the manufacturer Clemro install a One Eye magnetic filter (5000 series scrubber) on the suction side of the pump to extract and trap all the ferrous contamination down to and below 1 micron with no flow restriction.

RESULTS: After 90 days of operation, the maintenance manger Garth Anderson stated he could not believe the amount of metal removed from the hydraulic fluid (90litres) and that it was still clear. Anderson related these units are metal makers and this is the only way to affectively clean the fluid and extend the operational life of the hydraulic equipment, is clearly to employ quality magnetic filtration.

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.