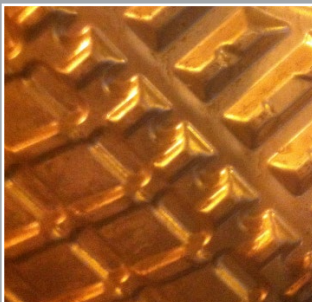
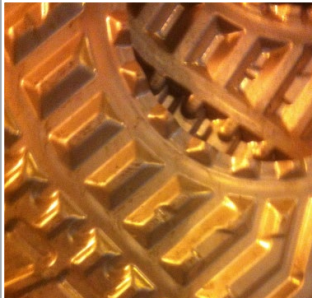


# Mining Strip Circuit Scale Control with ML1360

## Background

A large mining company operates a small gold recovery CIL circuit. The loaded carbon is acid washed, neutralized, and transferred to an elution vessel for gold desorption. The system includes plate and frame heat-up exchangers, cool-down exchangers, and Johnson screens to keep carbon in the vessel. Hot water boiler takes the barren solution to 290° F prior to entering the elution vessel. Boiler uses softened water as make-up.



## Problem

Customer is budgeted to complete one strip per day but has chronically fallen short because of fouled heat exchangers. The incumbent chemical supplier has treated the system for over four years and has made little progress toward improvement. The local ChemTreat team was allowed to survey the circuit and proposed an evaluation of ML1360 by using tote bins and special low volume metering pumps.

## Product Description

ML1360 is a concentrated scale inhibitor with a primary function of calcite inhibition.

## Program Evaluation

Since the scale was primarily growing in the heat-up exchangers, pressures and temperatures were monitored in the exchangers and elution vessel during each strip. After only a few days of run

time, the ChemTreat team established a final dosage of only 26 ppm in the pregnant stream and 36 ppm in the barren stream. This was a 33% reduction from the previous chemical supplier.

## Benefits

The superior performance of ML1360 was credited to plant's ability to meet their target of one strip per day and reduce the overall cost of chemical treatment by 44%. The plant was able to complete more than 36 strips per month following the introduction of this product, representing a strong increase over the period prior to its use.