CASE HISTORY

Mining

SOLENIS

RECORDED BENEFITS

- \$300,000 savings
- Eliminated cleaning shutdowns
- Eliminated 150 labor hours of maintenance for mechanical cleaning
- Improved safety through reduced hazardous working environment
- Significant reduction in water used for cleanings
- Real-time program monitoring

Tough-to-Treat Scale in Low pH Environment No Match for Solenis Antiscalant

Zalta™ MA11-442 Antiscalant

Customer Challenge

Variation in mineral characteristics and gold processes challenged the incumbent scale inhibitor due to limited pH range capabilities. Severe fouling by hard, tenacious calcium sulfate scale throughout the Acidification-Volatilization-Reneutralization (AVR) system resulted in biweekly shutdowns for mechanical cleaning of tanks and process lines. Due to the acidic environment and the potential exposure to cyanide gas, plant personnel were required to wear self-contained breathing equipment and were only allowed to work for ten minute periods.

Recommended Solution

Solenis' Mining Team field service, application experts and Research & Development worked together with the mine's metallurgical and laboratory groups to completely understand process conditions and effectively screen potential antiscalant solutions, leading to the development and successful implementation of Zalta MA 11-442.

Results Achieved

Zalta MA 11-442 inhibited calcium sulfate scale via modification of the crystalline nature of the deposit to form an amorphous sludge instead of hard, tenacious scale. This solution reduced process downtime, reduced maintenance labor hours, improved safety and saved a total of \$300,000/yr.



All statements, information and data presented herein are believed to be accurate and reliable, but are not to be taken as a guarantee, an express warranty, or an implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which Solenis International, L.P. and its affiliates and subsidiaries assume legal responsibility. TMTrademark, Solenis or its subsidiaries, registered in various countries. *Trademark owned by a third party. © 2015, Solenis.