ChemTreat
Case History

Calcium Sulfate Scale Control with ML2580

Background

A mining company operates an ore roasting operation for gold recovery in the western US. SO_2 is generated in the process and quenched with water creating a super saturated stream of SO_4. Calcium sulfate (gypsum) scale forms in the process plumbing and reduces critical flow rates. After months of reduced production, the decision was made to shut down and hydro-blast the system. The water treatment incumbent of 18 years told the customer there was nothing they could do to remedy the current conditions.

Problem

The company was falling behind their monthly production budget by 50%, clearly unacceptable.

Product Description

ML2580 is a unique blend of sequestering agents and crystal distortion polymers for a dual approach when inhibiting the formation of calcium sulfate.

Solution

After the system was cleaned by weeks of hydro-blasting, the local ChemTreat team was allowed to conduct a survey and propose their solutions. The deposit that plagued the site was calcium sulfate. ML2580 was proposed as the product of choice. ML2580 was evaluated in the process stream for several weeks to establish an effective dosage. A dosage of 10 ppm was achieved with no trace of deposition. Scale probes were examined daily and water chemistry analyzed to determine TDS mass balance.

Benefits

The final agreed-upon dosage of ML2580 was 33% lower than the previous chemical supplier. Overall annual costs were reduced by a staggering 45%.

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