NALCO Water
An Ecolab Company

MINING OPTIMIZER

SCALE CONTROL MONITORING FOR PROCESS WATER

When it comes to modeling, mining process water can be a challenge.

- **Process water is highly dynamic:** Process water has multiple water constituents originating from reagents, oxidative dissolution of the ores, microbial species, and a harsh physicochemical environment characterized by high pH, TSS and conductivity.
- **Process water is highly complex:** Most software packages are not designed to model complex mining water. In fact, many existing models resort to a 'trial and error' method to attempt to understand scale formation in mining water.

Take Control of Your Water with Mining Optimizer

Mining Optimizer from Nalco Water models mine water using a 'whole site' water management approach to help better predict and control scaling events.

This proven approach includes a process survey, water sampling, modeling, and creation of a water map to help identify your facility's unique challenges. Our experts work to address identified issues with a suite of innovative offerings beyond chemical treatment, including:

Water management and blending philosophy

Chemistry selection and dosage optimization

Monitoring and control panels

Service and maintenance planning

MINING OPTIMIZER
PROCESS WATER
SCALE CONTROL MONITORING

What-If Analysis Aids Risk Mitigation & Scenario Planning

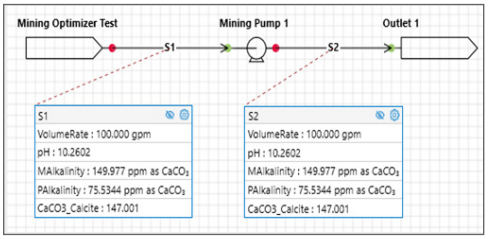
Mining Optimizer factors in the complex nature of managing an entire site's water blending to provide a more holistic solution for keeping your pipes clean and flowing. Built specifically for mine water conditions, it leverages What-If Analysis to:

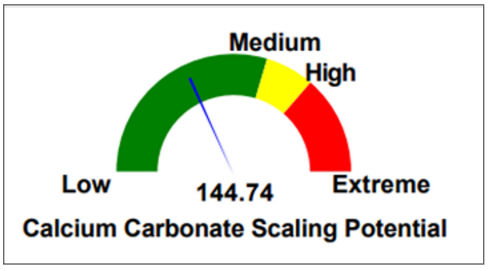
- Learn scale formation drivers
- Assess water blending impact
- Inform product selection based on sound scientific principles
- Model the impact of pH modifiers (i.e., lime and acid)
- Optimize dose points

The Mining Optimizer Advantage

Compared to traditional modeling, Optimizer is mine-water specific, allowing it to:

- Account for water species salient to mine waters then apply correction factors in the simulation
- Model speciation in high-alkaline environments with greater accuracy
- Identify alternate water sources for more efficient water management and blending





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