Antiscalant for High Temperature, High Solids Slurry Conditions
Zalta™ MA11-556 Antiscalant

Customer Challenge
One of the largest gold mines in the world was experiencing costly production downtime and cleaning costs due to gypsum scale in a critical slurry cooling unit operation. The severity of the scale caused the mill to shut down often, with recent conditions resulting in shutdowns as frequently as every 2.5 months in order to clean the slurry pipes and pumps.

Recommended Solution
Given the harsh operating conditions including high temperature (as high as 90°C) and high solids (40 wt% average), and with an expert understanding of the gypsum scale formation, Solenis applied water, slurry, scale analyses and an extensive offsite product testing procedure to select Zalta™ MA11-556 antiscalant as the optimal solution. Process poison testing was also conducted to ensure the antiscalant had no negative impact on gold and silver recovery. After extensive cleaning during a maintenance shutdown, an extended onsite trial was started to validate the performance and ROI of this solution.

Results Achieved
Immediate results were achieved. The process is running at targeted throughput and no cleanings are scheduled. By eliminating the gypsum scale and associated downtime, the mine has achieved increased production and significantly reduced cleaning costs, while also freeing up labor hours to be used in other areas of the mill.

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