

RECORDED BENEFITS

- ~\$2M USD improvement in generation output
- No interruption of plant operation during cleaning
- Averted the need to drill out exchanger tubes
- Significantly improved safety and contamination risks
- Reduced parasitic loads and maintenance on re-injection pump

Geothermal Power Plant Improves Production Capacity Using Online Clean Solenis Well Cleaning Program

Customer Challenge

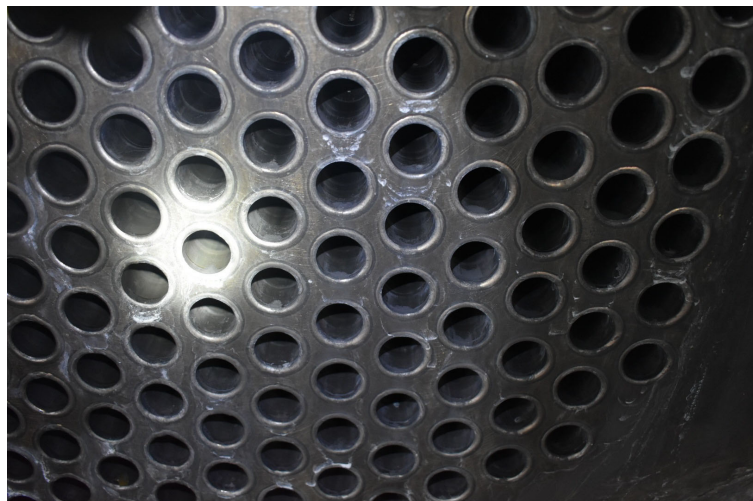
A geothermal power generating facility located in New Zealand was challenged with stibnite deposits forming in its binary plant. The plant was forced to shut down and be mechanically cleaned or taken offline to be chemically cleaned. Apart from the safety issues around this potentially carcinogenic deposit, the costs and plant disruption was significant.

Recommended Solution

Solenis developed a method whereby the stibnite deposits and silica deposits could be removed, while the plant remained in full operation. The challenge was to dissolve the deposits but not induce secondary deposition caused by caustic and keep the deposits transportable through the reinjection system. The solution is a combination of operational and chemical processes.

Results Achieved

The new cleaning program has led to cleans being carried out far less frequently leading to a reduction in costs, which maintains a higher overall plant production capacity. Maintenance costs and downtime has decreased significantly and the risk of contamination and human exposure to the toxic deposits is eliminated.



Clean heat exchanger surfaces have improved heat exchange efficiency and delivered increased power generation