

# CONFIDENTIAL MINE

Project Development  
South America

## Client:

Yamana Gold, Inc.

## Contract Value:

\$200,000

## Performance Period:

2005 – 2006

## Technical Areas:

- Project Piloting
- Solid Waste Management
- Environmental Infrastructure
- Water Resources
- Civil Design
- Geotechnical, Geology and Hydrogeology
- Financial and Risk Management

## Successes:

Assisted with the development of project alternatives that reduced environmental and health and safety liability, and provided for a sustainable closure approach



## BACKGROUND

A proposed new gold mine development located at altitude in the Andes Mountains in South America. Technical challenges included dealing with naturally occurring acidic conditions, acid mine waste disposal, water balance management, extreme high wind conditions, steep, rugged terrain, and a potentially sensitive environment.

## SES ROLE

SES staff developed project operating and closure plans that met the technical challenges. SES developed access road designs, a mill site design that provided for wind protection, overall site water tolerance management including treatment and discharge, tailings disposal that provided for acid generation control and protection from high winds, waste rock disposal, and closure plans that minimized closure liability. SES also assisted with the cost-benefit evaluations of alternative project layouts.