



CASE STUDY:

Codelco Andina Mine

MAKING MINING SAFER

OUTSOURCED SOLUTIONS FOR SLOPE MONITORING, SANTIAGO, CHILE

In December 2011, GroundProbe signed a five-year agreement to provide Codelco with a fully outsourced slope monitoring service for its Andina Mine in Chile.

Using data from two GroundProbe Slope Stability Radars (SSR-XT), and the expertise of a full time, on-site support team comprising of a Geotechnical Engineer, four Radar Operators and two Technical Specialists, GroundProbe provides around the clock monitoring, daily geotechnical reports, data analysis and on-the-ground support to the Andina mine.

The innovative partnership between Codelco Andina mine and GroundProbe is one of the first specialist outsourced solutions to the mining industry for mine slope monitoring.

“Global shortages of qualified personnel make it increasingly difficult for mines to find and retain expertise. Our Geotechnical Support Services are designed to alleviate resource shortages and to provide best practice slope monitoring, understanding and techniques through the provision of fully trained and qualified experts,” said Jacques Janse, GroundProbe’s Chief Operating Officer.

Codelco is currently the largest copper producing company in the world, producing approximately 11% of the world total. It owns the world’s largest known copper reserves and resources. Situated some 50 km northeast of Santiago is the Andina mine which is the subject of a major expansion scheme. The ore bodies are at considerable heights, between 3,000 and 4,200 metres above sea level, where operations can be severely affected by the extreme weather of the Andes Mountains.

GroundProbe’s slope monitoring equipment was already successfully integrated into Andina’s mine operations, prior to this agreement. In 2010, active monitoring using the SSR was instrumental in allowing the safe extraction of 1,600 tons of fine copper from the last benches before the closure of one of the pits.



GroundProbe's Brazil Business Manager, Antonio Rocha, said this is evidence of two companies working together, to provide a safer workplace for future operations.

“I am proud to have played a small role in helping our partners at Herculano Mining, and ensuring our community stays safe.”

GroundProbe has developed a complete emergency plan which includes a control room and watchdog connected to office sirens and alarms - automatically messaging the mobile phone of key personnel.

The accident is still under investigation, and with the affected area being monitored, Herculano Mining have procedures in place to ensure complete safety of the mines, local community, and environment.