



## **Teck and Do Better use ORBCOMM technology to improve safety for mining personnel in Chile**

ORBCOMM's fleet management technology, along with Do Better's solutions-building expertise and management, has succeeded in drastically improving safety for mining personnel.

# The challenge

Nestled in the Tarapacá region of northern Chile, Teck's Quebrada Blanca mine sits at an altitude of 4,440 meters, approximately 240 kilometers southeast of the city of Iquique and 1,500 kilometers from Santiago.

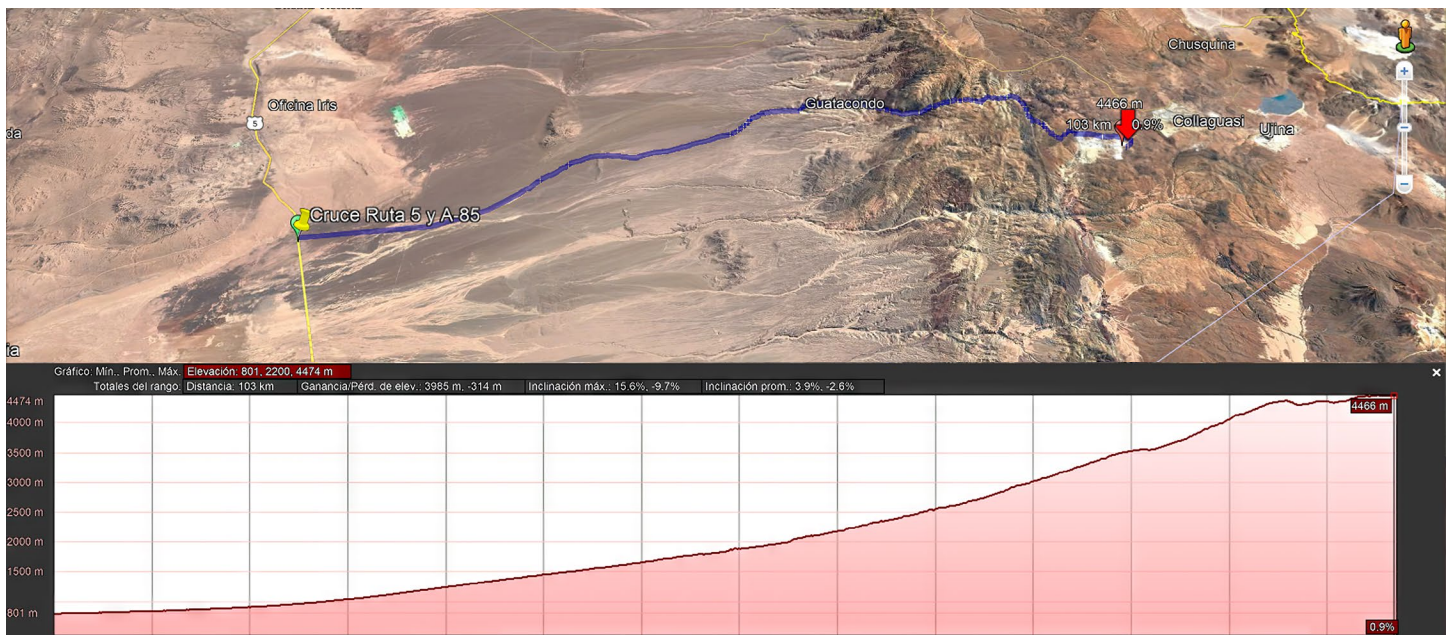
An open-pit operation, the Quebrada Blanca site leaches ore—a common process that involves dissolving metals from rock using chemicals—to produce copper cathodes which get transported by truck to Iquique for shipment to buyers.

Every day, cargo transport vehicles, heavy equipment and buses filled with mining personnel make a

240-kilometer journey—about six hours of driving—from Iquique to the Quebrada Blanca site.

Naturally, these factors create operational and safety complexities. Not only does the route contain sections with high gradients, steep slopes and tight curves, but it also has extreme changes in oxygen levels that can affect drivers throughout the journey.

Teck needed a comprehensive fleet safety solution that could monitor their Quebrada Blanca mining personnel and equipment around the clock, from the start of the journey to the mining site. To solve this problem, they decided to work with Do Better.



Route to Teck's Quebrada Blanca mine and its elevation profile

# The solution

Do Better—one of ORBCOMM's 400+ value-added resellers—built a complete management system for Teck that is driven by ORBCOMM's world-class technology, including onboard telematics, fleet safety devices and cloud-based applications. But before that, they needed to get a lay of the land.

Diego Bozzano, General Manager of Do Better, says "We started by performing a comprehensive analysis of the route between Iquique and the mine. This allowed us to determine the areas of risk and set maximum speeds for each section, along with authorized parking areas for drivers to have breaks."

Teck set geofences and parameters which enabled the system to send alerts for safety violations such as speeding, aggressive driving, harsh braking, seat belt use and more.

These alerts can be heard via the ORBCOMM fleet safety device in the cab of the vehicle, but also at the Do Better Operations Control Center in Santiago, where they're processed and reported back to the driver and Teck security personnel.

These events are handled based on escalation matrices that were built together with Teck to help promote fleet safety.

In addition, statistical reports are available to help identify safety issues and areas of improvement among drivers, vehicles and contractors. This knowledge can be passed on from Do Better to their clients, allowing them to build specific on-site training plans driven by data.

To ensure quality performance, Do Better established a preventative maintenance program for the telematics devices which included a physical inspection every three months.



*Driver interacting with ORBCOMM in-cab fleet safety device*

Over the past year, Do Better's ORBCOMM equipment has maintained 100% operability for their clients.

Cindy Villalobos, Chief Operations Officer at Do Better, says "ORBCOMM's technology solution has enabled us to deliver exceptional results to our Teck client. Their solution's ability to capture and transmit alerts, along with its intuitive interface, has been of great help in achieving our goals."



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**Cindy Villalobos**  
Chief Operations Officer, Do Better

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# Results

Do Better was able to create and deploy a comprehensive solution that reduced instances of sudden braking completely.

“Using ORBCOMM technology, we were able to build and deploy a solution that helped Teck reduce speeding alerts by 85% and completely eliminate harsh braking alerts,” says Villalobos. “With these new safety measures in place, Teck has achieved first-class

traffic safety operation standards for their Quebrada Blanca operation.”

This successful partnership prompted Teck to scale their services for the next four years, including adding ORBCOMM’s fleet tracking technology to a total fleet of 400 vehicles. With this in place, Teck will be able to further strengthen the safety protocols in place for their personnel and equipment as both travel into the mountains each day.

# About Do Better

Do Better is a consultancy company based in Santiago, Chile, that specializes in optimizing supply chains. They work with their clientele from conceptual engineering to implementation—using the latest

technology—to ensure their customers achieve the results they’re looking for. Learn more about Do Better and their services by [visiting their website](#).

For more information on our solutions or to book a demo:  
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