

COMPANY NAME: FRESNILLO

- ◆ **Location:** Sonora, Mexico
- ◆ **Mine:** La Herradura Gold Mine, 2nd largest in Mexico
- ◆ **Operating Since:** 1997
- ◆ **250 Cat trucks** on site

DGB Adoption Story

An avid adopter of Cat® MineStar™, Fresnillo was no stranger to exploring technologies to better their mining operation. Combine that business mentality with a large fleet of Cat 785C mining trucks—and the opportunity was perfect to leverage Dynamic Gas Blending™. Fresnillo agreed to a DGB trial period of 5,000 hours on two mining trucks. Just halfway through the trial, the machine performance and LNG substitution rates projected significant cost savings for Fresnillo’s operation. By the end of the trial, they ordered over 30 DGB kits for their 785C fleet—and have since decided to equip their entire 793D fleet with DGB. When you know, you know.

“IF YOU HAVE LNG AVAILABLE—
IT’S A NO-BRAINER.”

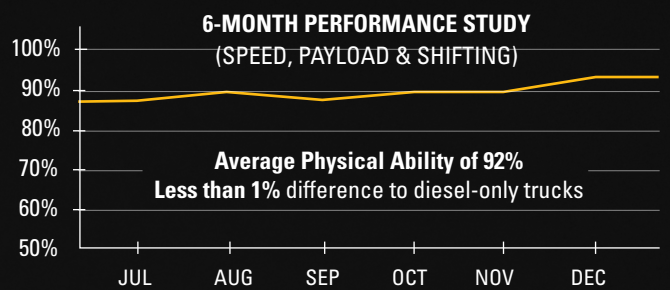
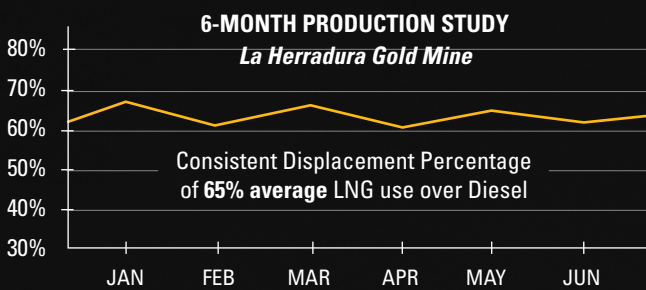
85% ▶ Initially, Fresnillo was pleased with a 70/30% LNG substitution rate. But over time, that number grew to 85% use of LNG.

0.1% ▶ To be clear, less than 1 percent. That was the difference in Fresnillo’s physical ability tests comparing DGB trucks vs. diesel-only. The test featured analysis for speed, payload and gear-shifting. The diesel-only machines reached 92.1 percent performance, while the trucks with DGB achieved 92 percent.

30% ▶ The average fuel cost savings using LNG is 30 percent. When you consider that with the substitution and performance numbers above—then consider the volume of trucks and hours on a mine site—the operational impacts adds up in a hurry.



THE BELOW CHARTS ARE 6-MONTH TRIAL STUDIES OF TWO 785C DGB TRUCKS CONDUCTED BY FRESNILLO AT LA HERRADURA GOLD MINE.



“YOU NEED TO ALWAYS FIND NEW WAYS OF IMPROVING COSTS.”

Plan for More Profits

Fresnillo continues to work with Caterpillar to build the plans of its DGB adoption—and the return on investment should follow. Beyond equipping their fleets with DGB, they are collaborating with a third-party to provide an LNG fuel plant next to the mine. This development should cut costs significantly and bring major process efficiencies. Caterpillar is still involved every step of the way, from connecting project partners to supporting and implementing.

Email DGBhelp@cat.com with any questions you may have today.