# **APPLICATION**

Ball Mill Bull Gear

Gold Mine Reaps Rewards after Pyroshield Conversion



Excessive consumption, nozzle plugging, product buildup and housekeeping issues

### **SOLUTION**

Pyroshield® Syn XHvy Open Gear Lubricant (9011)

### RESULTS

- Lowered pinion temperatures by 13%
- Cut lubrication consumption by 86%
- Eliminated housekeeping issues and dramatically reduced costs related to disposal of used lubricant

# CUSTOMER TESTIMONIAL

Underground Gold Mine

### **Customer Profile**

This underground gold mine in Ontario, Canada, has been a customer since 2020.

## **Application**

The mine has a 10x19-ft ball mill with 800-Kw drive and bull gear (16-ft-diameter and 22.6-in face width).

### Challenge

Using a competitive asphaltic-based open gear lubricant specifically marketed for mining on its ball mill bull gear, the customer was experiencing excessive consumption, messy housekeeping issues, nozzle plugging and product buildup. Consumption with this asphaltic lubricant was roughly 20 180-kg drums per year.

### **LE Solution**

Curtis Lammi with Lubrication Engineers of Canada recommended Pyroshield® Syn XHvy Open Gear Lubricant (9011) because of its track record in similar applications of reducing consumption and housekeeping issues, as well as eliminating hazardous waste. Pyroshield 9011 is a heavy-duty synthetic fluid designed to provide outstanding protection for highload, heavy-shock applications, such as large shrouded open gears used in mining. It is non-asphaltic and features a synergistic mix of Almasol®, LE's exclusive wear-reducing additive, and a unique combination of extreme pressure additives. It contains no lead and can be disposed of like any other nonhazardous petroleum oil. The customer did the recommended lubricant conversion in October 2020.



### **Results**

After converting the asphaltic lubricant to Pyroshield 9011, the mine successfully decreased annual lubricant consumption from approximately twenty 180-kg drums to nine 55-kg drums, an approximate 86% reduction. Along with the elimination of nozzle plugging and housekeeping issues, the pinion temperatures were lowered by 13%. A few months after the conversion, the mine reported overall cleaner operation and significantly less used lubricant requiring disposal.



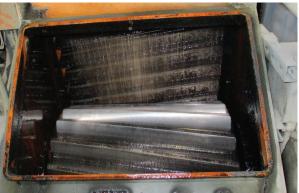






Housekeeping issues with asphaltic-based open gear lubricant





Before and after lubricant conversion. The after photo was taken just a couple months after conversion.

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