

# Reduced Overall Cost to Shovel Operations

## MINING (USA)

### SHOVEL OPEN GEAR & GREASE

### Molub-Alloy® 777-1 ES and Molub-Alloy® OG 936 SF Heavy



#### THE SITUATION

A surface gold mine in Nevada operating P&H 2300 and Hitachi 5500 shovels had lubrication challenges. The on-board open gear lube and general purpose grease tanks were replenished every 2 weeks due to high consumption rates.

Lubrication levels on various components were still not adequate, and premature wear was occurring due to conventional lubricants not staying in place.

#### BEFORE

- Shovels down every 1-2 weeks to re-fill lube reservoirs, causing lost production
- Excessive grease usage and waste
- Premature component failures

#### AFTER

- Timer and injector settings on auto-lube systems were reduced
- Better lubricant coating on components
- Production increase

#### THE SOLUTION

- Castrol surveyed the shovel lube systems and monitored grease consumption. Frequent lubrication intervals and many wide open injectors caused over-lubrication and grease falling on the ground.
- Open gear lube was converted to Castrol Molub-Alloy OG 936 SF Heavy. Grease systems were converted to Molub-Alloy 777-1 ES.
- Timer intervals and injector settings were gradually reduced.
- Open gears and bushings had better lubrication coating, and grease usage was greatly reduced.
- Shovel lube tanks did not have to be topped off as often, increasing production.

**Castrol High Performance Lubricants Reduce Total Cost of Ownership and Increase Productivity**