Situation
A Colombian coal mining company operates Komatsu PC80000 electric shovels. The shovels’ swingboxes are lubricated with Mobilgear™ 600 XP 220 gear oil, for which the maintenance team had originally set 2,000-hour oil drain intervals. Given the lubricant’s outstanding performance capabilities, the company asked ExxonMobil to determine the potential for extending lubricant life beyond the initial drain interval.

Recommendation
ExxonMobil engineers recommended implementing routine Signum™ Oil Analysis to monitor the condition of the swingboxes and their in-service lubricant, and complement the company’s exemplary maintenance practices. By paying close attention to the sample results, the company could take corrective action to address the sources of contamination and minimize leaks in the enclosed gearboxes to help prolong oil and component life.

Result
Through carefully monitoring the exceptional performance of Mobilgear 600 XP 220 gear oil with Signum Oil Analysis, the coal company stated it successfully extended drain intervals by 175 percent to 3,500 operating hours and that the enhanced maintenance program helped generate an annual savings of US $518,268 in improved production availability, longer drain intervals and component life. Additionally, through preventing the disposal of more than 1,150 gallons (4,353 liters) of used oil, the company calculated a significant decrease in its carbon footprint.

The product performance of Mobilgear 600 XP 220, alongside the application expertise provided by local ExxonMobil engineering support and Signum Oil Analysis, is helping to improve customer productivity potential.

Mobilgear 600 XP 220 Helps Extend Lubricant and Component Life, Reducing Environmental Impact and Generating a Company-Estimated Annual Savings of US $518,000

Komatsu PC80000 Electric Shovels
Coal Mining Company
Cesar, Colombia

Mobilgear 600 XP 220 gear oil helped extend drain intervals and component life on these electric shovels, generating a company-estimated savings of US $518,268 and significantly reducing the operation’s environmental impact.

For more information on Mobil Industrial lubricants and services, call your local company representative or visit mobilindustrial.com

This Proof of Performance is based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.