

APPLICATION
Cat® Wheel Loaders

LE Prevents Grease Running in Aggregate Producer's Mobile Equipment

CUSTOMER TESTIMONIAL
Allegheny Mineral Corporation

CHALLENGE

Grease running from bushings in warm weather; poor pin & bushing life

SOLUTION

Almamoly™ HD Grease (1488 & 1487)

RESULTS

- Eliminated grease running from bushings
- Provided better wear resistance
- Eliminated pin and bushing replacement issue

Customer Profile

Headquartered in Kittanning, Penn., Allegheny Mineral Corp. provides crushed stone, industrial rock dust and agricultural lime to Pennsylvania, Ohio and West Virginia. As of January 2015, it operated eight crushed stone plants in western Pennsylvania. The U.S. Geological Survey listed Allegheny Mineral as one of the 50 largest aggregates producers in the nation in March 2015. A subsidiary of Snyder Associated Companies, Allegheny has remained family owned and operated since 1953. It has been an LE customer since 1986.

Application

Caterpillar® 992G Wheel Loaders

Challenge

Pin and bushing life on the wheel loaders was unacceptably short, with replacement being very expensive. In warm weather, the 5 percent moly grease the company was using was thinning and running freely from upper and middle bucket tilt lever bushings and lower bucket bushing relief fittings. The automatic grease system was set at a high delivery rate to ensure adequate lubrication. Even so, equipment operators were dissatisfied with the poor performance of the grease.

RESULTS

After the switch to Almamoly 1488, the grease no longer ran from bushings. Instead, the LE grease formed a stable collar of lubricant extruding around the circumference of the upper and middle bucket tilt bushings. Rather than running out of the lower bucket bushing relief fitting, excess Almamoly extruded out of the fitting. With this level of improvement, Allegheny could choose to reduce the delivery rate of the automatic grease system without any loss in lubricant performance.

In the nearly three years since the switch to Almamoly, the company has not had to replace any pins or bushings on its wheel loaders. Equipment operators said that the Almamoly was providing good lubrication and wear protection. They can feel the

continued on next page



Online purchase available for U.S. customers.

www.LElubricants.com | 800.537.7683



RESULTS (cont.)

LE Solution

John Hayes, LE lubrication consultant, recommended LE's Almamoly™ HD Grease (1488) for the application. Almamoly is formulated with solid lubricants and calcium sulfonate complex thickener, making it ideal for use in severe conditions such as high temps, heavy loads and water. It is intended for long-lasting use in heavy-duty mobile equipment. Compared to other solid lubricant-containing greases that rely on moly or graphite alone, Almamoly's combination of 5 percent moly and Almasol®, LE's proprietary solid additive, gives it better wear resistance and ensures that it will stay in place even under extreme pressure or heavy shock loading conditions.



difference during operation, saying the machines gave "good control feedback provided by a 'floating bucket,' indicating minimal control surface sticking and good metal separation."

Throughout the somewhat mild Pennsylvania winter of 2014, Almamoly 1488 – an NLGI 1 grease – also demonstrated good cold weather pumpability. However, winter 2015 was a different story. With average temperatures below -6°C (20°F) for extended periods and lows below -17°C (0°F), Allegheny switched to Almamoly 1487 – the NLGI 0 grade – which is recommended for use in ambient temperatures below -9°C (15°F). This thinner version of Almamoly performed very well for the customer during cold weather operation.

With this success in the wheel loaders, the company began using Almamoly in additional equipment, including Cat 385BL and Komatsu PC 100LC excavators, Komatsu WA 800 wheel loaders, and Cat 777 rock trucks.

Thank you to Allegheny Mineral Corp., and John Hayes, LE lubrication consultant (pictured), for providing the information used in this report.



Almasol® is a registered trademark and Almamoly™ is a trademark of Lubrication Engineers, Inc. Cat® and Caterpillar® are registered trademarks of Caterpillar Inc.

LI70911 05-16



Online purchase available for U.S. customers.

www.LElubricants.com | 800.537.7683