

Mobil™ Lubricant Analysis and Mobil Pegasus™ 605 Ultra 40 improve wear protection and prolong engine life for large energy producer

Landfill Engines | Energy Producer | North America

Situation

A large multi-state company generates power from landfill gas using Caterpillar® 3520 and 3516 engines. The fuel supply contains harmful contaminants like Hydrogen sulfide and siloxane, which damage key engine components and reduce lubricant life when not properly managed. This has led to high oil consumption and increased engine rebuild costs, affecting profitability. The company sought the support of the Mobil™ engineering to assess their fleet to help extend engine and oil life, while protecting against fuel stream contaminants.

Recommendation

Following a thorough assessment of the company's fleet, historical maintenance records, used oil analysis history, and compatibility verification, the Mobil™ team recommended converting to **Mobil Pegasus™ 605 Ultra 40 gas engine oil**. The high-performance oil offers numerous benefits for landfill gas applications, including extended oil life, enhanced engine cleanliness by controlling deposits and varnish, improved wear protection to prolong engine life, and optimized performance with better spark plug efficiency and reduced power loss from detonation. The Mobil™ team supported a test trial, leveraging **Mobil™ Lubricant Analysis**, to provide informed support as well as validate the product's effectiveness, outlining oil condemning limits, while closely monitoring gas streams.

Impact

The company successfully converted to **Mobil Pegasus™ 605 Ultra 40 gas engine oil** and achieved a 10% extension in oil drain intervals. This change resulted in immediate cost savings while also protecting engine life and performance, leading to an annual savings of \$195,000*



Annual Savings



\$ 195,000 USD*

Revenue Improvement



15,000 Gallons**

Environmental Improvement

Advancing Productivity

Helping you reach your Safety, Environmental Care** and Productivity goals through our innovative lubricants and services is our highest priority. That's Advancing Productivity. And that's how we help you achieve your broader vision of success.

*This performance test is based on the experience of a single customer. Actual results may vary depending on the type of equipment used, its maintenance, operating conditions and environment, as well as any previous lubricants used. The results obtained in this test do not guarantee nor are intended to guarantee compliance with any applicable environmental standard or obligation. The results were obtained by a single client under specific conditions in a previous study and any benefit obtained has been verified by each client using its own criteria and experience. The effects or results obtained are not necessarily directly attributable to the use of the products and may be the result of several factors, including those mentioned in this paragraph. **Visit mobil.com to learn how certain Mobil-branded lubricants may provide benefits to help reduce environmental impact. Actual benefits depend upon product, operating conditions and application. 2025 ExxonMobil. All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries. All Rights Reserved.