Biogas Aholfing GmbH & Co. KG, Aholfing, Germany

Biogas Aholfing GmbH finds added benefits and optimal efficiency with SENTRON™ LD 5000

"Switching to SENTRON[™] LD 5000 set new standards for drain intervals at Biogas Aholfing GmbH, up to 3,000 hours, even when being exposed to intermittent contaminated gas of 49% higher H₂S than typical pretreated levels for over seven weeks. The robust nature of SENTRON LD 5000 and its long-term performance benefits led Biogas Aholfing GmbH to sustainable cost savings and reduced downtime in addition to reducing costs of operations."

 John Busl, Co-Owner Biogas Aholfing GmbH & Co. KG, Aholfing, Germany



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Biogas Aholfing GmbH produces methane fermented from corn, grasses and chicken manure using a biogas fermenter. A GE Jenbacher J312GS gas engine fuels the supply of 526kW of electrical power per hour for the German electricity grid and 566kW of thermal energy per hour for the fermenting processes of a nearby plantation. Biogas Aholfing GmbH prides itself on over eight years of reliably supplying energy using SENTRON LD 5000 to reduce operating costs and keep machinery running efficiently.



The Challenge

Biogas Aholfing GmbH runs its GE Jenbacher J312GS engine around the clock. The fermenter that creates the engine's biofuel has de-sulphuring capabilities but is still subject to the demands of a varying quality of gas fermentation output and the amount of bio-methane produced and stored. The quality of the fermentation ingredients also affects the overall quality of the biogas. Regular and efficient maintenance is paramount.

"One of the most important things about running a biogas-generated power plant is maintaining an optimal biological balance in the fermenter. We need to ensure that the fermenter, engine and ancillary processes are operating optimally," says co-owner John Busl.

The Solution

Biogas Aholfing GmbH needed a robust oil they could trust to perform effectively and reliably. Maintaining a reliable engine is necessary to ensure consistent and efficient performance over its lifetime. Knowing their choice of oil can withstand anticipated and even unexpected challenges means peace of mind to Busl and his team. In SENTRON LD 5000, they found an oil that could run effectively and reliably, and even withstand some fluctuations in fuel gas quality.

"There was a time when our de-sulphuring unit intermittently had issues and until it was repaired, lower-quality unfiltered gas was able to enter the engine," said Busl. "The gas H₂S levels bounced from the normal H₂S of 174ppm to, on average, 344ppm. As we performed an oil analysis after the unit was fixed, we were amazed that the SENTRON LD 5000 was still usable! I am very satisfied with the results of Petro-Canada's SENTRON LD 5000."

The Result

By switching to SENTRON LD 5000, Biogas Aholfing was able to achieve up to 3,000-hour drain intervals, even when being exposed to intermittent unfiltered gas. The robust and reliable oil has meant improved cost savings to the company, which was able to drop its oil usage to approximately 2.5 grams per kWh.

"Regular maintenance and an effective lubricant have allowed us to be able to keep the engine running at an optimal efficiency level, enabling us to sell reliable electricity into the German grid," said Busl.

About Biogas Aholfing

Biogas Aholfing GmbH & Co. KG, located near the Danube River in Bavaria, Germany is headed by John Busl, Volker Lang and Richard Sutz, who are all fourth-generation farmers. In 2006, this company built a modern biogas fermenter to produce energy from bio-methane, and has been servicing fermenting processes and the German power grid ever since.

SENTRON

Combined with an effective maintenance program, SENTRON LD 5000 can extend drain intervals by up to 200% over the leading conventional low-ash gas engine oil and help minimize wear and deposits on crucial gas engine components. Petro-Canada Lubricants' SENTRON LD 5000 is a premium-performance, long-life, low-ash gas engine oil. Formulated with Petro-Canada Lubricants' ultra-pure HT Severely Hydrocracked base oils, SENTRON LD 5000 delivers extended drain intervals and excellent anti-wear protection – even under the most severe operating conditions.



To learn more about how Petro-Canada Lubricants can help your business visit: **lubricants.petro-canada.com** or contact us at **lubecsr@petrocanadalsp.com** LUB3157E (2016.04)



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