



POWER PLANT INCREASES OIL- DRAIN INTERVAL BY 217% WITH SHELL MYSELLA S5 N*

TOTAL REPORTED ANNUAL CUSTOMER SAVING

US\$8,545



COMPANY: Thermie Serres

COUNTRY: Greece

APPLICATION: Gas engines

SAVING: US\$8,545 total reported annual customer saving

KEY EDGE: Shell Mysella S5 N, Shell LubeAnalyst

Power generation company Thermie Serres operates a power plant in Serres, Greece, that has four DEUTZ gas engines. The company was planning to change the engine lubricant to extend its oil-drain interval of 4,000 hours. It needed a lubricant that was approved by the engine manufacturer, so approached different suppliers for advice.

Shell offered Thermie Serres an optimised package that included Shell Mysella S5 N and the Shell LubeAnalyst oil and equipment condition monitoring service. Shell Mysella S5 N meets DEUTZ's requirements and can provide a longer oil-drain interval compared with competitors' products.

Thermie Serres used Shell Mysella S5 N to fill the four engines. By using Shell LubeAnalyst, the company found that the lubricant in all four engines was suitable to continue in use at the normal oil-drain interval and that the equipment was in good condition. The company was able to extend the oil-drain interval by 8,700 hours to 12,700 hours, more than three times its previous interval. By extending its oil-drain interval, Thermie Serres has reduced its lubricant consumption and the cost of oil filters, and has reported total annual savings of US\$8,545. The company has asserted that it considers Shell Mysella S5 N to be one of the leading lubricants for gas engines.



SPE00070

*Shell Mysella S5 N is the new name for the Shell lubricant previously known as Shell Mysella XL.

1

CHALLENGE

Power generation company Thermie Serres operates a power plant in Serres, Greece, that has four DEUTZ gas engines. It needed a lubricant that was approved by the engine manufacturer, so approached different suppliers for advice.

2

SOLUTION

Shell offered Thermie Serres an optimised package that included Shell Mysella S5 N and the Shell LubeAnalyst oil and equipment condition monitoring service. The oil meets DEUTZ's requirements and can provide a longer oil-drain interval compared with competitors' products.

3

OUTCOME

Thermie Serres used Shell Mysella S5 N to fill the four engines and found that the oil-drain interval could be extended to 12,700 hours, an increase of 8,700 hours and more than three times the previous interval.

4

VALUE

By extending its engines' oil-drain interval, Thermie Serres has reduced its lubricant consumption and the cost of oil filters, and has reported total annual savings of US\$8,545.¹ The company has asserted that it considers Shell Mysella S5 N to be one of the leading lubricants for gas engines.

¹The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.



SHELL MYSELLA S5 N

LONG-LIFE, LOW-ASH, GAS-ENGINE OIL

Shell Mysella S5 N is a premium gas-engine oil formulated for use in the latest generation of highly rated gas or dual-fuel engines that require a low-ash oil. The product has been specially developed to provide extended oil-drain intervals in those natural gas engines where oil life is a limiting operational factor. It offers excellent engine protection and extended overhaul intervals for critical components such as valves, seats, pistons and liners. In addition, Shell Mysella S5 N is designed to reduce heat-exchanger fouling to enhance plant efficiency.



Applications

- Gas engines. Shell Mysella S5 N is suitable for all types of four-stroke gas engine that burn natural gas, biogas or landfill gas, including those with spark or pilot ignition, and lean or rich burn. It is also suitable for four-stroke dual-fuel engines that use gas as their main fuel, and two-stroke gas engines where a low-ash oil can be used.
- Gas compressors. The product is suitable for engine-driven gas compressors where the engine and compressor have a common lubrication system.

Performance features and benefits

- Extended oil life. By resisting oxidation, nitration, viscosity increase and the formation of harmful acids, especially in demanding cogeneration applications, Shell Mysella S5 N offers a step change in oil-drain intervals compared with previous-generation gas engine oils.²
- Engine protection. Shell Mysella S5 N offers reliable control of deposits and excellent piston cleanliness in advanced engine designs. It has been formulated with the optimal level of ash components, which also helps to prolong the life of valves and spark plugs. With its low phosphorus level, Shell Mysella S5 N is compatible with engines equipped with exhaust emission catalysts for carbon monoxide, nitrogen oxide and formaldehyde.

- System efficiency. Shell Mysella S5 N helps to maintain excellent cleanliness and exhaust deposit control in the boiler and intercooler, thus maximising heat recovery. In engines utilising crank case gas recirculation, Shell Mysella S5 N also helps to reduce fouling and prevents clogging of charge air coolers.

Specifications and approvals (15W-40)

Shell Mysella S5 N meets the requirements of API CF and Caterpillar. It has been approved by Cummins as a "premium grade – long change interval" oil for highest-rated QSV81/91G and QSK60G; MWM-Deutz; GE-Jenbacher 2, 3 and 6-series, installations with catalytic converter for formaldehyde; MAN high-speed engines; MDE; Perkins; Rolls-Royce Bergen K-G1, K-G2, K-G3, K-G4 and B series; Wärtsilä; Waukesha cogeneration applications; and Waukesha APG.

²When used with landfill or biogases, the oil life will depend on the level of contaminants in the gas.

Complementary products

Application	Lubricants
Greases	Shell Gadus (including Shell Tactic EMV lubricator systems)
Industrial gas turbine oil	Shell Turbo GT
Heavy duty engine oil	Shell Rimula