PT Kwan Samudera Mandiri (PT Kwan), based in Jakarta, Indonesia, offers the transportation of coal, logs, rocks, chemical waste and other materials using a fleet of tugboats and barges on various waters and rivers throughout the country. The company is aiming to expand its fleet and services in Indonesia to deliver high value to its customers and stakeholders by deploying the best-available technology combined with strategic marketing and management.

As part of this goal, PT Kwan wanted to increase its vessels’ oil-drain interval without compromising on lubricant performance and, importantly, to improve the fleet’s efficiency and uptime through fewer breakdowns.

Shell Marine distributor PT Cahaya Samoedera Bersaudara (PT CSB), with support and guidance from Shell Marine, suggested that PT Kwan should run a trial in the main engines of the Kwan 9 tugboat using Shell Rimula R4 X 15W-40. This heavy-duty multigrade engine oil is formulated using Shell’s innovative Dynamic Protection technology, which features an advanced additive system that adapts to an engine’s specific requirements. It helps to provide protection in three key areas: acid and corrosion control; wear control; and deposit control. Consequently, PT CSB and Shell Marine believed that the vessel’s oil-drain interval would be extended to meet PT Kwan’s objectives.

A used oil analysis programme along with expert diagnosis from a local Shell laboratory showed that the oil-drain interval had been safely extended to 1,000 hours from the 700 hours when using a competitor’s oil; a 43% increase. In addition, the vessel also improved its operating efficiency through less downtime.

Through increasing its fleet’s oil-drain interval, and consequent lower lubricant consumption, and improving its efficiency through more uptime, PT Kwan has reported potential annual savings of about US$510 per vessel.¹

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.
PT Kwan wanted to extend its vessels’ oil-drain interval without compromising on lubricant performance and, more importantly, to improve the fleet’s efficiency and uptime through fewer breakdowns.

Shell Marine distributor and frontline technical services provider PT CSB suggested that PT Kwan should run a trial in the Kwan 9 tugboat using Shell Rimula R4 X 15W-40 heavy-duty engine oil.

A used oil analysis showed that the oil-drain interval had been safely extended to 1,000 hours from 700 hours after using a Shell Marine lubricant. In addition, the vessel also improved its operating efficiency with less downtime.

Through increasing its fleet’s oil-drain interval, and the consequent lower lubricant consumption, and improving its efficiency through more uptime, PT Kwan has reported potential annual savings of about US$10 per vessel or US$2,040 for four vessels.1

1 The 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 SERVICE**

**Shell LubeMonitor**

A service designed to monitor two- and four-stroke marine engine performance. It includes access to Shell tools and advice to help you strike and maintain an acceptable balance between oil costs and maintenance expenses.

**Shell LubeAnalyst**

A flexible used-oil laboratory analysis service designed to save you time and money on maintenance resulting from equipment failure. This early-warning system aims to give you peace of mind that your equipment and lubricants are in optimum working order.

**Shell LubeAdvisor**

This on-site support from a global team of field-based engineers includes lubrication surveys, vessel assessments, and in-depth technical and applications support when required. Back-up support is provided by telephone, fax or email.

**SHELL RIMULA**

**Shell RIMULA**

The product purpose is to safeguarding high-speed, four-stroke engines from corrosive wear.

High-performance engine oil for highly rated high-speed diesel engines that meet the latest API and ACEA specifications.

- Suitable for engines burning distillate fuels with a sulphur content of up to 1.0 %wt.
- Outstanding engine cleanliness
- Superior wear control
- Excellent oxidation resistance

Contact your Shell Marine account manager to find out more or visit [www.shell.com/marine](http://www.shell.com/marine).