Mobil Gard

Mobil Servsm Oil Drain Optimization Program helps Chan Seng Huat extend oil drain intervals by 200%



Mobilgard[™] HSD 15W-40 helped to safely extend the oil drain intervals of the Cummins engines of two fishing boats from 250 to 750 hours. The success of the trial was confirmed by Mobil Serv[™] Lubricant Analysis data.

Situation

Chan Seng Huat was hoping to increase the operational efficiency of two of its fishery boats, each fitted with a Cummins engine – models NTA855 and KTA19-M respectively. The owner was therefore looking to find ways to safely reduce downtime, improve productivity and extend oil drain intervals. It contacted ExxonMobil with a view to assessing the best possible engine lubricant alternatives.

Oil drain intervals safely extended by





Oil change-related expenditure cut by US \$27,350 (RM126,800)**

Recommendation

ExxonMobil recommended that the two vessels switch to Mobilgard[®] HSD 15W-40, an oil designed to provide outstanding performance in modern, high-speed marine diesel engines.

The lubricant's superior thermal and oxidation stability helps to reduce low-temperature sludge build-up and high-temperature deposits. This offers marine operators the potential to achieve enhanced engine and key component cleanliness, maximise component life and extend intervals between oil and filter changes.*

ExxonMobil's field service engineers also advised the implementation of Mobil Serv^{**} Lubricant Analysis, a next generation used oil analysis programme, to monitor the in-service performance of the vessels' new engine oil.

The engine manufacturer's recommended oil drain for each engine model was 250 hours but Chan Seng Huat hoped it would be possible to extend that. Oil samples were taken and tested at 500 and 750 hours to assess the lubricant's on-going performance.

Results

Mobil Serv Lubricant Analysis data showed that Mobilgard HSD 15W-40 had retained a consistent viscosity close to that of a fresh oil throughout the trial, demonstrating its resistance to mechanical sheering and oxidation, delivering a sufficient oil film thickness to minimise metal-to-metal contact. There were no signs of excessive carbon build-up and the oil's BN retention ensured an appropriate level of detergency.

As a result, the oil drain intervals of the two Cummins engines were safely extended to "The results of this trial exceeded all our expectations. A threefold improvement in oil drain intervals, along with the added peace of mind provided by Mobil ServSM Lubricant Analysis, made the switch to Mobilgard HSD 15W-40 worthwhile." Chia Jui Leng Owner, Chan Seng Huat

750 hours, three times the engine builder's recommendation.

Based on the outcomes of the trials, if Chan Seng Huat was to implement the change across its fleet of 20 vessels, a total of 8,500 litres of oil could be saved each year, offering a potential saving of more than US \$27,350 (RM126,800), including extended equipment life and service benefits.**

Mobil Serv Lubricant Analysis is part of ExxonMobil's Mobil Serv Oil Drain Optimization Program, a bespoke offer designed to support the operational needs of vessel operators. It includes customised lubrication recommendations and inservice oil monitoring. On this occasion its results suggested that the service life could be further extended by using Mobilgard HSD 15W-40.

*Compared with conventional, mineral 20W-50 products.

**Projected savings are based on a full implementation across Chan Seng Huat's fleet of 20 vessels (assuming 10 vessels use Cummins NTA855 and 10 vessels use Cummins KTA19-M) and include reduction of oil consumed, maintenance fees and oil analysis tests.

Based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used.

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