

## ExxonMobil & Berge Bulk Maritime join forces to record 53% liner wear rate reductions



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The combination of Mobil Serv<sup>SM</sup> Cylinder Condition Monitoring, ExxonMobil lubricants and close collaboration with vessel crew reduced feed rate by 19%, significantly reducing total cost of ownership for Berge Bulk Maritime.

### Background

The pursuit of energy efficiency within global shipping can seem an overwhelming task for operators who are only just getting to grips with the IMO's latest regulation. Facing the intricacies of running latest generation engines, whilst also handling intricacies of compliance regulations can feel daunting. ExxonMobil's scrape down oil analysis service, Mobil Serv<sup>SM</sup> Cylinder Condition Monitoring, is specifically designed to help vessel operators optimise their cylinder oil feed rates and identify issues such as abnormal wear rate, allowing operators to run their fleet much more efficiently.

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*Teck Siang Sim, BergeBulk Maritime*

### Situation

Berge Bulk Maritime was concerned about a vessel in its fleet that was actively managing wear rate close to caution limits through increase in cylinder oil feed rates. This led to a higher spend on oil. The vessel, Berge Everest, operates on a combination of a fitted scrubber and a newer, corrosive engine design. This mix of new technologies introduced unprecedented complexities for the crew when it came to engine and lubricant management.

As a result, the operator needed a fast, accurate and safe method to optimise operations and reduce total cost of ownership.

### Recommendation

Drawing on their existing relationship, Berge Bulk Maritime were able to count on the expertise offered by ExxonMobil engineers who recommended implementing Mobil Serv<sup>SM</sup> Cylinder Condition Monitoring to allow real-time insight into the engine condition. The detailed insights from the programme, would allow safe and decisive actions to be taken, while monitoring the state of the liners in combination with a range of cylinder oil options.

The aim was to optimise feed rates with each lubricant choice and protect the engine from premature wear. The investigation was completed as part of ExxonMobil's Mobil Serv<sup>SM</sup> Planned Engineering Service (PES) programme.

## Impact

The combination of high quality lubricants, timely and accurate scrape down oil analysis, and strong collaboration between the ExxonMobil technical team and the vessel's crew provided the winning formula to success. As a result, the Berge Everest's crew had the confidence to push the feed rates lower than they've ever been before, with a 19% reduction in cylinder oil consumption as well as reducing liner wear by 53%.

"We are constantly faced with challenges, complexity and uncertainty, in pursuing optimisation" explains Teck Siang Sim, Berge Bulk Maritime. "However, having a reliable and supportive partner makes all

the difference. ExxonMobil went the extra mile by sending engineers to attend our conferences, and presenting plans to the ship staff which is a support that is invaluable to our success."

Furthermore, inspired by the benefits proven on the Berge Everest, Berge Bulk Maritime will be implementing Mobil Serv<sup>SM</sup> Cylinder Condition Monitoring across nearly its entire fleet. The implementation will further allow the operator to take advantage of the service's XRF technology which measures sulphur content ensuring added peace of mind when complying with the IMO 2020 sulphur cap.



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

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