OIL ANALYSIS REPORT

DOUG YANMAR 51574 - STARBOARD DIESEL ENGINE

Sample No: VPA046907

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMATION VPA046907 VPA043051 Sample Number Sample Date 30 Oct 2023 08 Dec 2022 Machine Hours 0 2721 0 0 **Oil Hours** Oil Changed N/A N/A NORMAL NORMAL Sample Status **OIL CONDITION** Visc @ 100°C cSt 14.2 14.1 Base Number (BN) mg KOH/g 8.1 9.6 Oxidation (PA) % 65 71 CONTAMINATION 0.3 Soot % % 0.3 % Nitration (PA) 57 63 Sulfation (PA) % 55 61 % Glycol NEG NEG Fuel % <1.0 < 1.0 Silicon ppm 2 5 Sodium 3 0 ppm Potassium ppm 7 3 WEAR METALS Iron ppm 4 5 Copper 3 2 ppm Lead ppm 0 2 Tin 0 0 ppm Aluminum 2 ppm 2 < 1 Chromium **||** < 1 ppm Molybdenum 15 ppm **||** <1 Nickel ■ <1 <1 ppm Titanium 0 🔲 0 ppm Silver ppm 0 🔲 0 Manganese **||** <1 <1 ppm Vanadium 0 0 ppm **ADDITIVES** Calcium 2179 2252 ppm Magnesium 34 118 ppm Zinc ppm 1267 1255 Phosphorus ppm 1018 1017 Barium ppm 0 🔲 0 **177** Boron ppm 171

Contact/Location: TARAH AULD - VP867279



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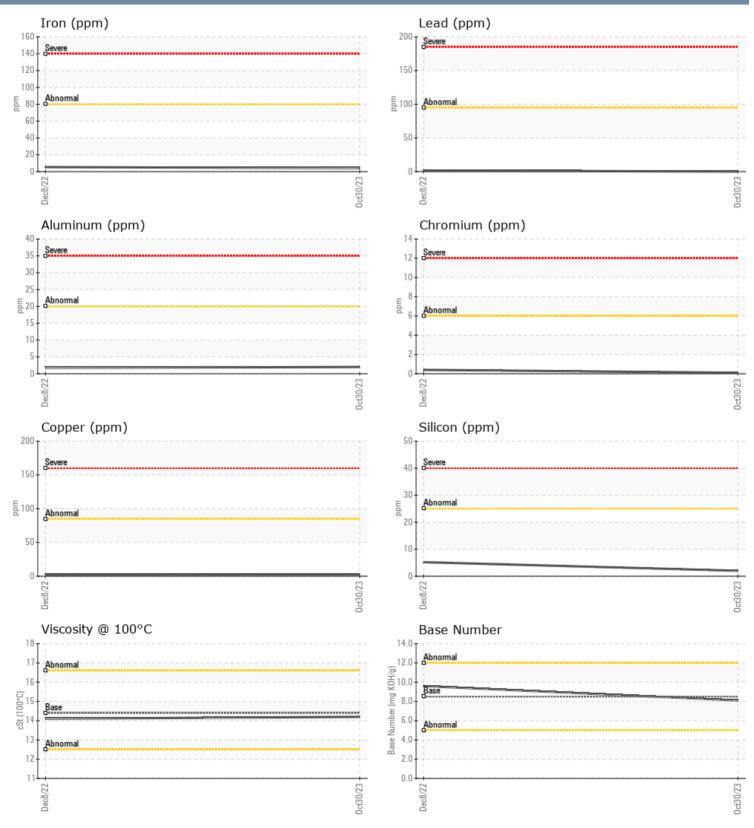
Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

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GRAPHS



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