OIL ANALYSIS REPORT

DOUG YAKOLA RM VOLVO PENTA 7011429977 - STARBOARD DIESEL ENGINE

Sample No: VPA060440

Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

SAMPLE INFORMATION VPA060440 Sample Number Sample Date 13 Sep 2023 Machine Hours 1472 **Oil Hours** 46 Oil Changed Not Changd NORMAL Sample Status T: **OIL CONDITION** F: 13.0 Visc @ 100°C cSt Base Number (BN) mg KOH/g 9.5 Oxidation (PA) % 54 CONTAMINATION Soot % % 0.4 % Nitration (PA) 48 Sulfation (PA) % 52 % Glycol NEG Fuel % <1.0 Silicon ppm 3 Sodium 2 ppm Potassium 1 ppm WEAR METALS Iron ppm 7 28 Copper ppm Lead ppm 2 Tin ■ <1 ppm Aluminum ppm 1 Chromium 0 ppm Molybdenum ppm 62 Nickel ■ <1 ppm Titanium **||** <1 ppm Silver ppm 0 Manganese **||** <1 ppm Vanadium <1 ppm **ADDITIVES** Calcium 1197 ppm Magnesium 1104 ppm 🔳 1379 Zinc ppm Phosphorus ppm 1112 Barium ppm 0 🔲

Bosun's Marine Inc. - VP1242375 205 Newbury St, 100 Falmouth Rd. PEABODY, MA US 01960 Contact: BEN KOPP bkopp@bosuns.com T:

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.

 Depot:
 VP611292

 Unique No:
 10649628

 Signed:
 Sean Felton

 Report Date:
 20 Sep 2023

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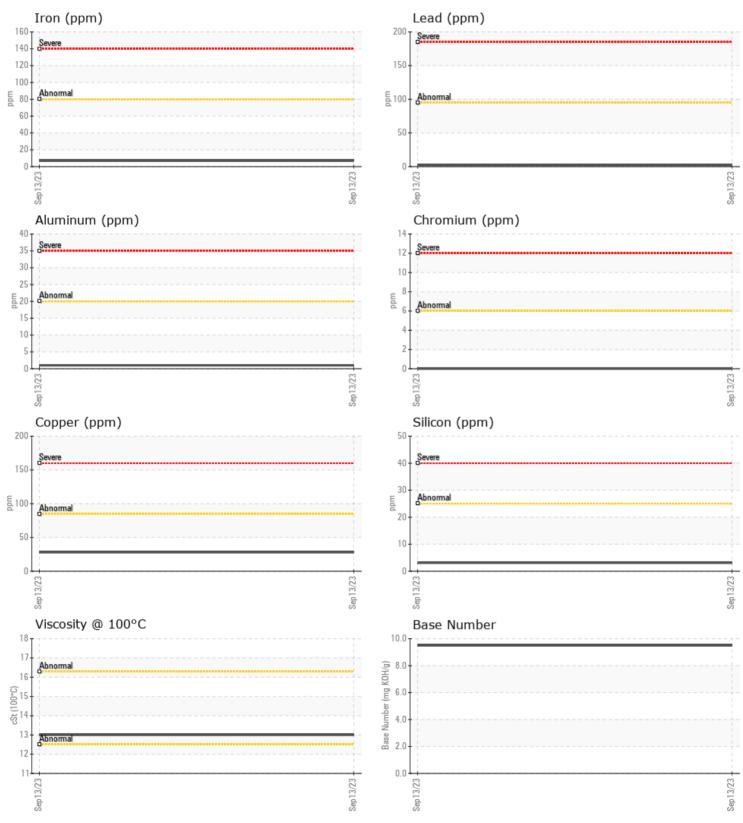
ppm

Boron

OIL ANALYSIS REPORT



GRAPHS



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Contact/Location: BEN KOPP - VP611292