OIL ANALYSIS REPORT

SIRENA VOLVO PENTA 70112032191 - STARBOARD DIESEL ENGINE

Sample No: VPA057491

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION VPA057491 Sample Number 16 Nov 2023 Sample Date Machine Hours 113 **Oil Hours** 113 Oil Changed Changed ATTENTION Sample Status Т٠ **OIL CONDITION** F: Visc @ 100°C **11.8** cSt Base Number (BN) mg KOH/g 7.2 Oxidation (PA) % 37 CONTAMINATION Water % NEG % Soot % 0.2 Nitration (PA) % 53 Sulfation (PA) % 42 Glycol % NEG Fuel % **A** 3.1 Silicon 29 ppm Sodium 0 🔲 ppm Potassium 1 ppm WEAR METALS Iron 9 ppm 48 Copper ppm Lead ppm 1 Tin 2 ppm Aluminum ppm 1 Chromium <1 ppm Molybdenum ppm 15 Nickel ■ <1</p> ppm Titanium ppm 0 🔲 Silver ■<1 ppm Manganese 1 ppm Vanadium ppm 0 **ADDITIVES** Calcium 1225 ppm 820 Magnesium ppm Zinc ppm 1252 Phosphorus ppm 1073 Barium 0 🔲 ppm Boron ppm 9 Depot:

Outstanding Marine PO Box 274 GALENA, MD US 21635 Contact: Ronda Bolinger rlwb@verizon.net T:

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Unique No: 10749762 Signed: Jonathan Hester Report Date: 22 Nov 2023

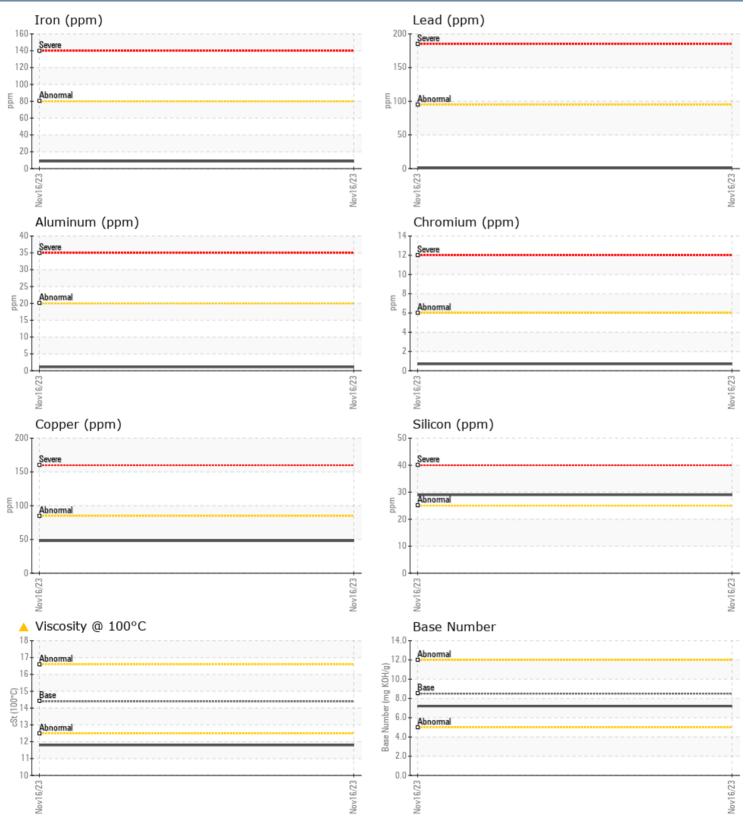
Contact/Location: Ronda Bolinger - VP153685

VP153685

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GRAPHS



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Contact/Location: Ronda Bolinger - VP153685