OIL ANALYSIS REPORT

IMMRAMA 23-2794 VOLVO PENTA A409493 - STARBOARD DIESEL ENGINE

Sample No: VPA057498

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION VPA057498 Sample Number Sample Date 14 Dec 2023 Machine Hours 1147 **Oil Hours** 0 Oil Changed Changed NORMAL Sample Status Т٠ **OIL CONDITION** F: Visc @ 100°C cSt 13.6 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 65 CONTAMINATION % Water NEG % Soot % 0.1 Nitration (PA) % 63 % Sulfation (PA) 55 Glycol % NEG Fuel % <1.0 Silicon 3 ppm Sodium 0 🔲 ppm Potassium **||** <1 ppm WEAR METALS Iron 5 ppm 2 Copper ppm Lead 0 🔲 ppm Tin ■ <1 ppm Aluminum **||** < 1 ppm Chromium 0 ppm Molybdenum 52 ppm Nickel 0 ppm Titanium ppm 0 🔲 Silver 0 ppm Manganese **||** < 1 ppm Vanadium ppm 0 **ADDITIVES** Calcium 1121 ppm Magnesium 886 ppm Zinc ppm 1281 Phosphorus ppm 989 Barium 0 ppm Boron ppm 15 Depot:

Unique No: 10792784 Signed: Don Baldridge **Report Date:** 20 Dec 2023

Contact/Location: Ronda Bolinger - VP153685

VP153685

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

Diagnosis

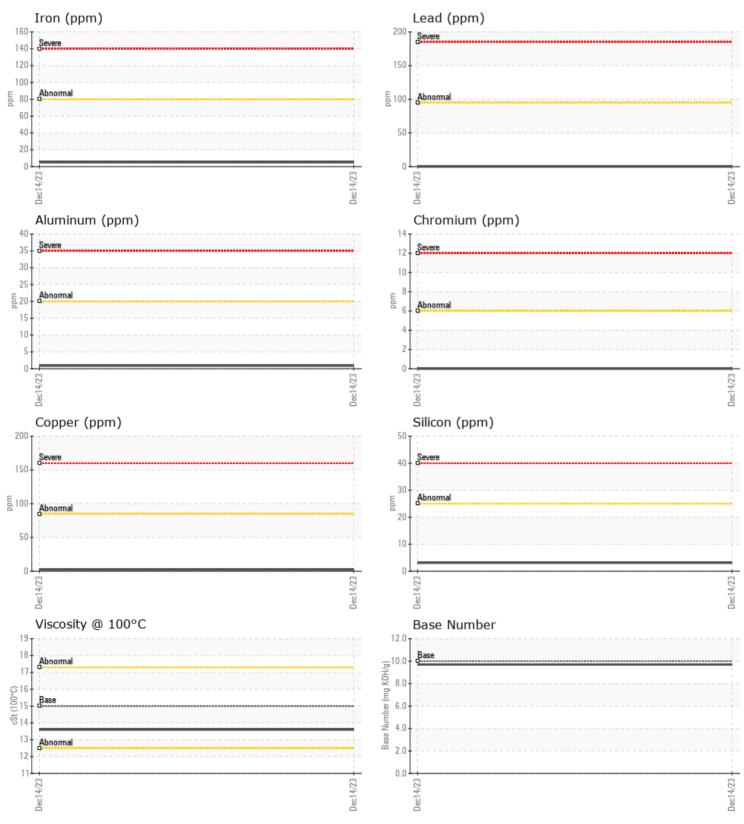
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



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GRAPHS



Report Id: VP153685 [WUSCAR] 06037555 (Generated: 12/22/2023 09:40:36) Rev: 1

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