OIL ANALYSIS REPORT

SF BAR PILOTS BAR PILOTS VOLVO PENTA A314796 - STARBOARD DIESEL ENGINE

Sample No: VPA055273

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

SAMPLE INFORMATION VPA055273 Sample Number **Helmuts Marine Service** Sample Date 01 Aug 2023 Machine Hours 2772 2772 **Oil Hours** Oil Changed Not Changd NORMAL Sample Status T: x: **OIL CONDITION** F: x: 13.3 Visc @ 100°C cSt Base Number (BN) mg KOH/g 8.3 Oxidation (PA) % 57 CONTAMINATION Soot % % 0.1 % Nitration (PA) 58 Sulfation (PA) % 55 % Glycol NEG Fuel % <1.0 Silicon ppm 4 Sodium 0 🔲 ppm Potassium ppm 3 WEAR METALS Iron ppm 7 Copper 8 ppm Lead ppm 1 🔲 Tin **|** <1 ppm Aluminum ppm 2 Chromium **|** <1 ppm Molybdenum 68 ppm Nickel 2 ppm Titanium 0 🔲 ppm Silver ppm **||** <1 Manganese ■ <1 ppm Vanadium 0 ppm **ADDITIVES** Calcium 1377 ppm Magnesium 712 ppm 887 Zinc ppm Phosphorus ppm 757 Barium ppm 0 🔲 Boron ppm 206 Depot: Unique No:

Signed:

Report Date:

VP152741

10589063

Sean Felton

08 Aug 2023

619 Canal Street

SAN RAFAEL. CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HEI MUTSMARINE COM

Diagnosis

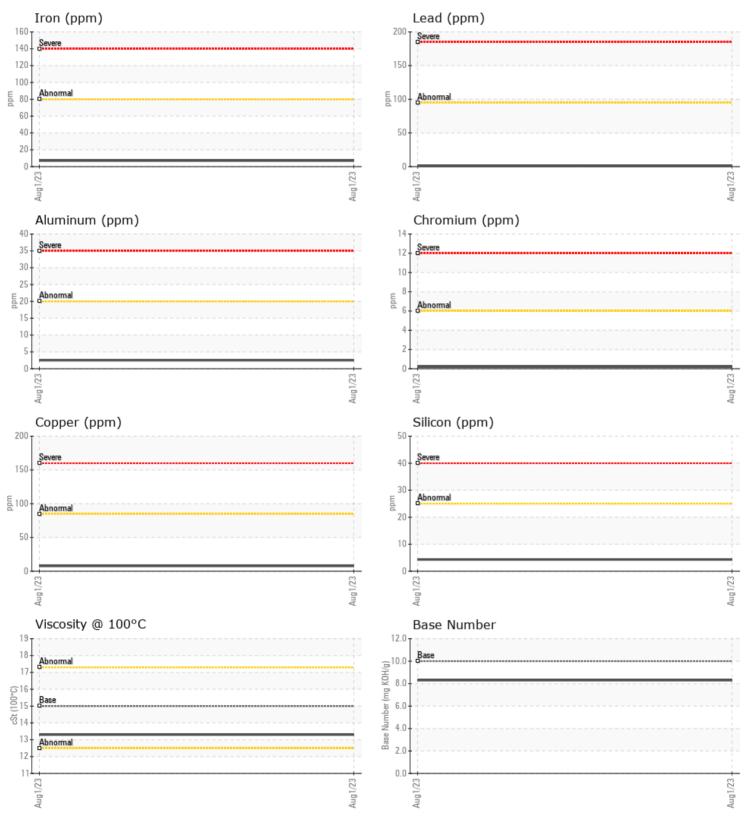
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



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GRAPHS



Report Id: VP152741 [WUSCAR] 05917149 (Generated: 08/10/2023 13:46:03) Rev: 1

Contact/Location: NADINE URCIUOLI - VP152741