OIL ANALYSIS REPORT

NADINE URCIUOLI SANDRA WILSON VOLVO PENTA 7011361785 - PORT DIESEL ENGINE

Sample No: VPA057466

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION VPA057466 VPA041790 Sample Number Sample Date 21 Dec 2023 22 Sep 2022 Machine Hours 665 631 **Oil Hours** 665 631 Oil Changed Changed Not Changd NORMAL Sample Status NORMAL **OIL CONDITION** Visc @ 100°C cSt 13.5 13.1 Base Number (BN) mg KOH/g 9.5 11.2 Oxidation (PA) % 61 61 CONTAMINATION Water % NEG NFG % Soot % 0.1 0.1 Nitration (PA) % 43 50 Sulfation (PA) % 59 56 Glycol % NEG NFG Fuel % <1.0 <1.0 Silicon 5 5 ppm Sodium **||** <1 1 ppm Potassium ppm **||** < 1 1 WEAR METALS Iron 4 3 ppm 3 6 Copper ppm Lead ppm **||** < 1 1 Tin 1 < 1 ppm Aluminum 0 ppm 4 Chromium 0 0 ppm 103 Molybdenum 61 ppm Nickel 0 <1 ppm Titanium **||** <1 0 ppm Silver 0 0 ppm Manganese < 1 **||** <1 ppm Vanadium ppm 0 <1 **ADDITIVES** 1030 Calcium 1494 ppm 826 970 Magnesium ppm Zinc ppm 955 1230 Phosphorus ppm 819 1048 Barium **<**1 0 ppm Boron ppm 278 $\square 0$

Helmuts Marine Service

619 Canal Street SAN RAFAEL, CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HELMUTSMARINE.COM T: x: F: x:

VOLVO PENTA

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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:
 VP152741

 Unique No:
 10808089

 Signed:
 Sean Felton

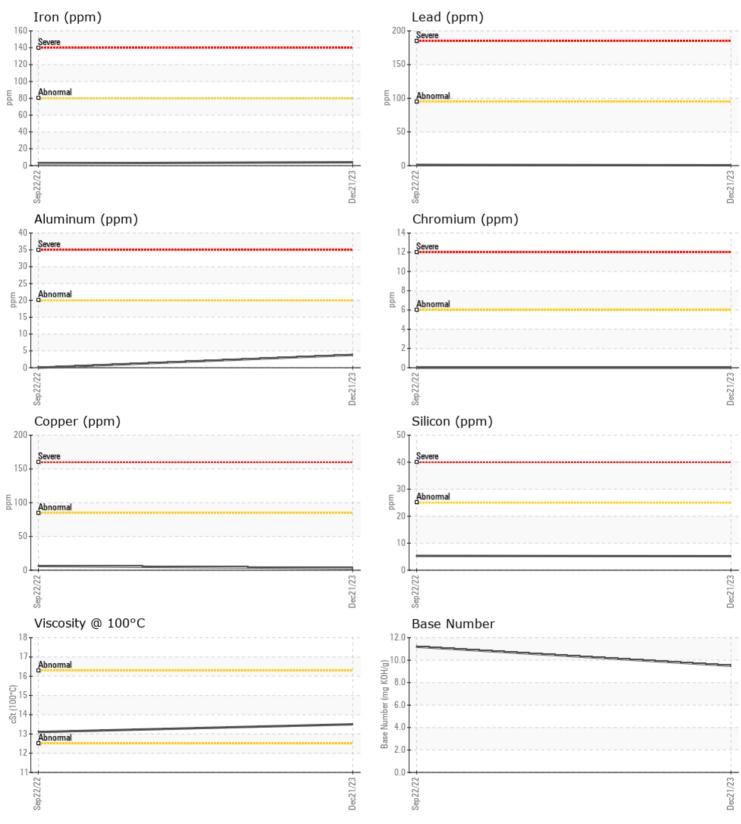
 Report Date:
 02 Jan 2024

Contact/Location: NADINE URCIUOLI - VP152741

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GRAPHS



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