## **OIL ANALYSIS REPORT**

### TIM CASE 23-2745 VOLVO PENTA 2013386462 - STARBOARD DIESEL ENGINE

Sample No: VPA058506

Oil Type: VOLVO PENTA SAE 15W40

#### SAMPLE INFORMATION VPA058506 VPA040733 Sample Number 20 Nov 2023 Sample Date 12 Sep 2022 Machine Hours 1693 1490 **Oil Hours** 0 50 Oil Changed Changed Not Changd NORMAL Sample Status NORMAL **OIL CONDITION** Visc @ 100°C 13.8 cSt 13.3 Base Number (BN) mg KOH/g 8.1 11.0 Oxidation (PA) % 63 59 CONTAMINATION Water % NEG NFG % Soot % 0.2 0.2 Nitration (PA) % 51 47 Sulfation (PA) % 55 56 Glycol % NEG NEG Fuel % <1.0 <1.0 Silicon 2 4 ppm Sodium **||** <1 1 ppm Potassium 4 2 ppm WEAR METALS Iron 2 3 ppm **||** <1 1 Copper ppm Lead ppm 0 < 1 Tin 0 <1 ppm Aluminum 1 ppm 1 Chromium 0 < 1 ppm Molybdenum 62 ppm 9 Nickel 0 < 1 ppm Titanium ppm 0 0 Silver 0 <1 ppm Manganese 0 🔲 < 1 ppm 0 Vanadium ppm 0 **ADDITIVES** 1048 Calcium 2099 ppm 897 Magnesium ppm 172 Zinc ppm 1309 1261 Phosphorus ppm 1035 1048 Barium 0 0 ppm 142 Boron ppm 2

#### **Outstanding Marine**

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

#### 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 suitable for further service.

 Depot:
 VP153685

 Unique No:
 10767881

 Signed:
 Sean Felton

 Report Date:
 05 Dec 2023

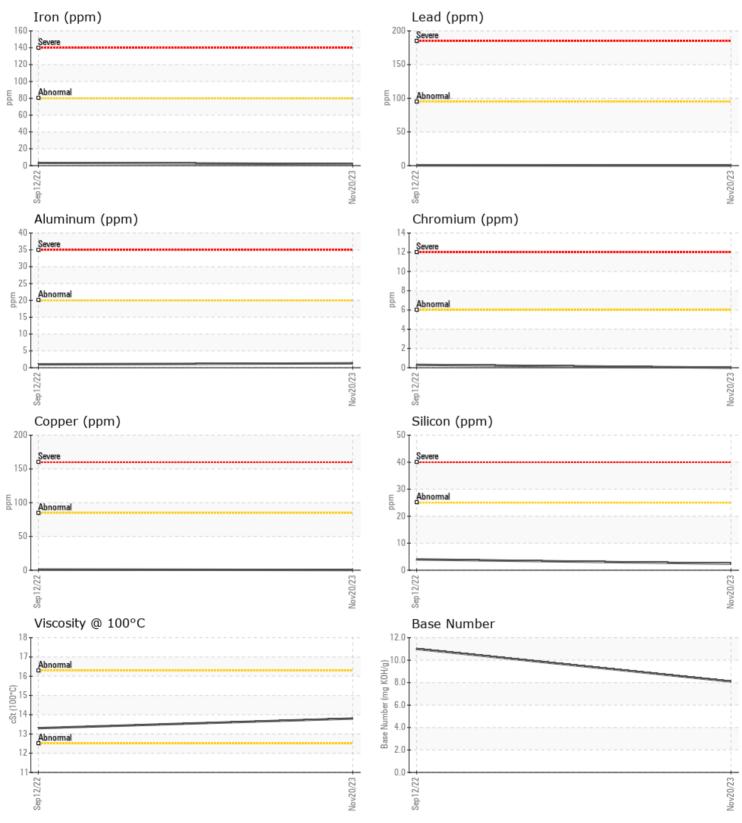
Contact/Location: Ronda Bolinger - VP153685

### VOLVO PENTA

# **OIL ANALYSIS REPORT**



#### GRAPHS



Report Id: VP153685 [WUSCAR] 06023381 (Generated: 12/05/2023 16:57:57) Rev: 1

Contact/Location: Ronda Bolinger - VP153685