OIL ANALYSIS REPORT

VOLVO PENTA A 174959 - STARBOARD DIESEL ENGINE

Sample No: VPA058182

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION Sample Number VPA058182 02 Feb 2024 Sample Date Machine Hours 306 **Oil Hours** 100 Oil Changed Changed NORMAL Sample Status **OIL CONDITION** F: Visc @ 100°C cSt 14.4 Base Number (BN) mg KOH/g 8.0 Oxidation (PA) % 78 CONTAMINATION % Water NEG % Soot % 0.1 Nitration (PA) % 94 % Sulfation (PA) 57 Glycol % NEG Fuel % <1.0 Silicon 6 ppm Sodium 3 ppm Potassium 4 ppm WEAR METALS 11 Iron ppm 11 Copper ppm Lead ppm 4 Tin ■ <1 ppm Aluminum ppm 3 Chromium <1 ppm Molybdenum ppm 13 Nickel 3 ppm Titanium ppm **||** <1 0 Silver ppm Manganese 0 🔲 ppm Vanadium ppm <1 **ADDITIVES** Calcium 1210 ppm Magnesium 727 ppm Zinc ppm 882 Phosphorus ppm 680 Barium 10 ppm Boron ppm 75

 Depot:
 VP179089

 Unique No:
 10882767

 Signed:
 Sean Felton

 Report Date:
 16 Feb 2024

Contact/Location: ROBBIN MURDOCK - VP179089



North Harbor Diesel Inc 720 30Th Street ANACORTES, WA US 98221 Contact: ROBBIN MURDOCK robbin@northharbordiesel.com T: (360)299-1904

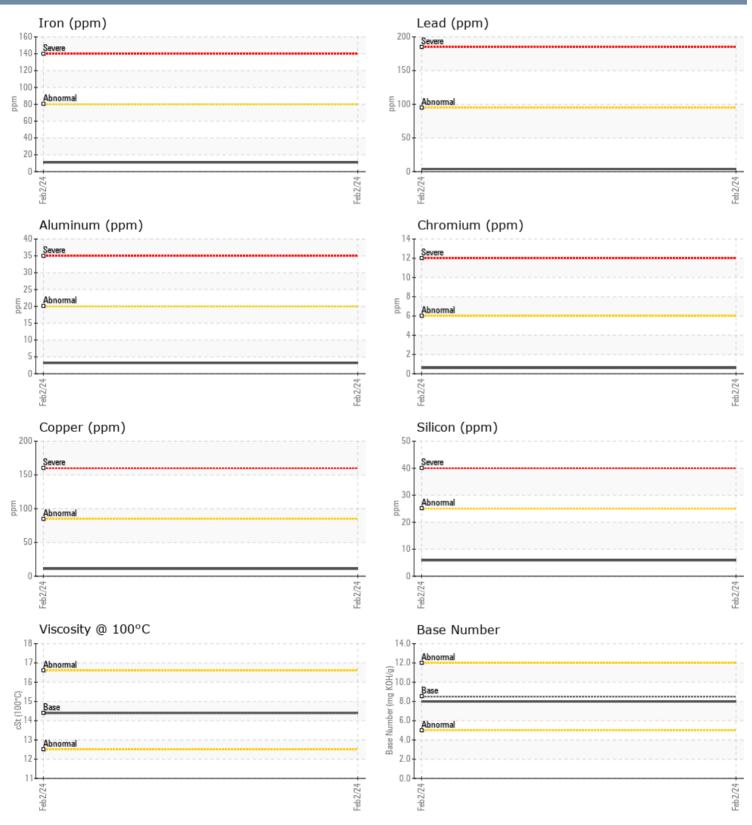
Diagnosis

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.

OIL ANALYSIS REPORT



GRAPHS



Report Id: VP179089 [WUSCAR] 06089914 (Generated: 02/16/2024 15:20:16) Rev: 1

Contact/Location: ROBBIN MURDOCK - VP179089