OIL ANALYSIS REPORT

VOLVO PENTA

SAMO SAMO VOLVO PENTA 20132091169 - RIGHT OUTER DIESEL ENGINE

Sample No: VPA049889

Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

SAMPLE INFORMATION VPA049889 VPA046354 Sample Number 02 Nov 2023 Sample Date 05 Apr 2023 Machine Hours 302 201 **Oil Hours** 50 201 Oil Changed Changed Not Changd NORMAL Sample Status MARGINAL **OIL CONDITION** Visc @ 100°C 13.3 cSt 13.3 Base Number (BN) mg KOH/g 9.8 7.5 Oxidation (PA) % 53 34 CONTAMINATION 0.4 Soot % % 0.2 % Nitration (PA) 42 47 Sulfation (PA) % 51 42 % Glycol NEG NEG Fuel % <1.0 <1.0 Silicon ppm 12 **4** 34 Sodium 1 < 1 ppm Potassium 5 25 ppm WEAR METALS Iron ppm 6 27 Copper 6 30 ppm Lead ppm 0 1 Tin 0 3 ppm Aluminum 14 ppm 3 < 1 Chromium **||** < 1 ppm Molybdenum 9 ppm 53 0 Nickel 0 ppm Titanium 0 🔲 0 ppm Silver ppm 0 0 Manganese 0 🔲 3 ppm Vanadium 0 0 ppm **ADDITIVES** 1179 Calcium 1031 ppm Magnesium 932 932 ppm 1316 Zinc ppm 1228 Phosphorus ppm 1067 1053 Barium ppm 5 0 Boron ppm 0 $\square 7$

Marine International Diesels Inc. 3600 HACIENDA BLVD UNIT G DAVIE, FL US 33314 Contact: ASHANTI BURKE aburke@midiflorida.com T: (954)761-1086 F: (954)761-1186

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.

 Depot:
 VP694356

 Unique No:
 10729264

 Signed:
 Sean Felton

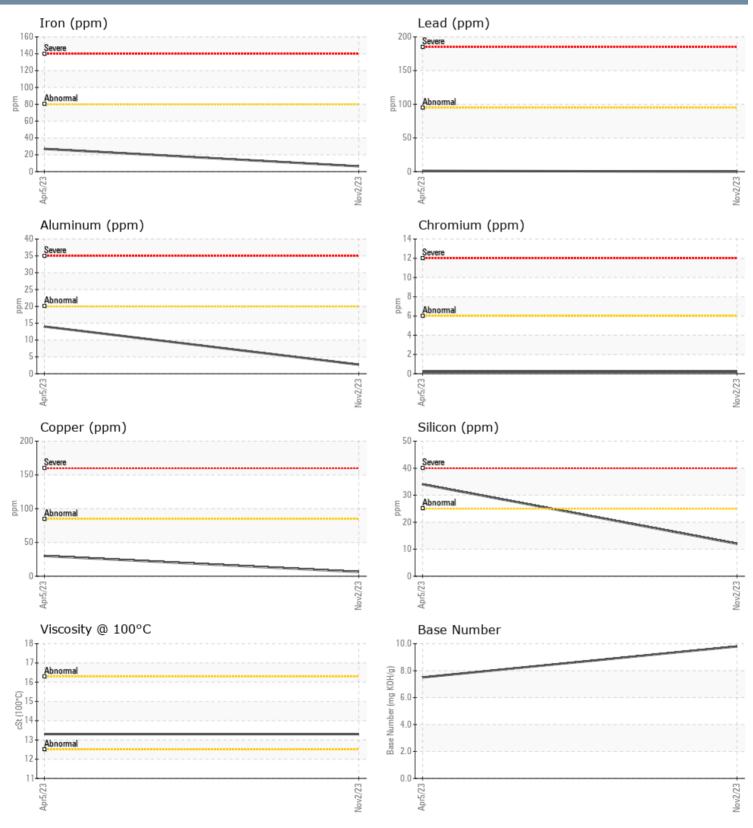
 Report Date:
 09 Nov 2023

Contact/Location: ASHANTI BURKE - VP694356

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GRAPHS



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