

OIL ANALYSIS REPORT

VOLVO PENTA

MILLER VOLVO PENTA 5103932844H - CENTER DIESEL ENGINE

Sample No: VPA055214

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA055214	---	---	---
Sample Date	04 Aug 2023	---	---	---
Machine Hours	650	---	---	---
Oil Hours	50	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

Outstanding Marine

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

OIL CONDITION

Visc @ 100°C	cSt	▲ 11.4	---	---	---
Base Number (BN)	mg KOH/g	■ 8.5	---	---	---
Oxidation (PA)	%	■ 61	---	---	---

CONTAMINATION

Soot %	%	■ 0.3	---	---	---
Nitration (PA)	%	■ 65	---	---	---
Sulfation (PA)	%	■ 52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	◆ 9.8	---	---	---
Silicon	ppm	■ 3	---	---	---
Sodium	ppm	■ 18	---	---	---
Potassium	ppm	■ 2	---	---	---

Diagnosis

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

WEAR METALS

Iron	ppm	■ 20	---	---	---
Copper	ppm	■ 2	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 5	---	---	---
Chromium	ppm	■ 5	---	---	---
Molybdenum	ppm	■ 52	---	---	---
Nickel	ppm	■ 1	---	---	---
Titanium	ppm	■ <1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	■ 0	---	---	---

ADDITIVES

Calcium	ppm	■ 1174	---	---	---
Magnesium	ppm	■ 816	---	---	---
Zinc	ppm	■ 1166	---	---	---
Phosphorus	ppm	■ 945	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 37	---	---	---

Depot: VP153685
Unique No: 10601857
Signed: Jonathan Hester
Report Date: 14 Aug 2023

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GRAPHS

