

OIL ANALYSIS REPORT

VOLVO PENTA

15194 CRUSADER 650511 - STARBOARD GASOLINE ENGINE

Sample No: VPA060959

Oil Type: {unknown}

SAMPLE INFORMATION

Sample Number	VPA060959	---	---	---
Sample Date	02 Feb 2024	---	---	---
Machine Hours	878	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	SEVERE	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 11.3	---	---	---
Base Number (BN)	mg KOH/g	█ 8.1	---	---	---
Oxidation (PA)	%	21	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	14	---	---	---
Sulfation (PA)	%	17	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	▲ 32	---	---	---
Sodium	ppm	▲ 4918	---	---	---
Potassium	ppm	▲ 250	---	---	---

WEAR METALS

Iron	ppm	● 1048	---	---	---
Copper	ppm	█ 120	---	---	---
Lead	ppm	█ 4	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	● 110	---	---	---
Chromium	ppm	█ 4	---	---	---
Molybdenum	ppm	9	---	---	---
Nickel	ppm	█ 4	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	8	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	1699	---	---	---
Magnesium	ppm	887	---	---	---
Zinc	ppm	950	---	---	---
Phosphorus	ppm	727	---	---	---
Barium	ppm	5	---	---	---
Boron	ppm	105	---	---	---

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T:
F:

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston and cylinder wear is indicated. Sodium and/or potassium levels are high. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: VP151520
Unique No: 10863247
Signed: Jonathan Hester
Report Date: 08 Feb 2024

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GRAPHS

