

OIL ANALYSIS REPORT

**VOLVO
PENTA**

JOHN KEYES 7716690 VOLVO PENTA A213259 - CENTER DIESEL ENGINE

Sample No: VPA056541

Oil Type: NOT GIVEN

SAMPLE INFORMATION

Sample Number	VPA056541	---	---	---
Sample Date	19 Sep 2023	---	---	---
Machine Hours	986	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

Pacific Power Group - VP981534

7215 S 228th St

Kent, WA

US 98032

Contact: PAT RYAN

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F:

OIL CONDITION

Visc @ 100°C	cSt	█ 13.9	---	---	---
Base Number (BN)	mg KOH/g	█ 9.8	---	---	---
Oxidation (PA)	%	70	---	---	---

CONTAMINATION

Soot %	%	█ 0.5	---	---	---
Nitration (PA)	%	84	---	---	---
Sulfation (PA)	%	60	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 10	---	---	---
Sodium	ppm	▲ 180	---	---	---
Potassium	ppm	█ 8	---	---	---

WEAR METALS

Iron	ppm	█ 118	---	---	---
Copper	ppm	█ 8	---	---	---
Lead	ppm	█ 6	---	---	---
Tin	ppm	█ 2	---	---	---
Aluminum	ppm	▲ 80	---	---	---
Chromium	ppm	█ 7	---	---	---
Molybdenum	ppm	█ 65	---	---	---
Nickel	ppm	█ 4	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ <1	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	█ 1113	---	---	---
Magnesium	ppm	█ 885	---	---	---
Zinc	ppm	█ 1154	---	---	---
Phosphorus	ppm	█ 972	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 44	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The aluminum level is abnormal. Piston wear is indicated. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: VP99031103

Unique No: 10673366

Signed: Jonathan Hester

Report Date: 04 Oct 2023

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GRAPHS

