

# OIL ANALYSIS REPORT

# VOLVO PENTA

## HEFFERNAN 624276 VOLVO PENTA A1175201 - CENTER GASOLINE ENGINE

Sample No: VPA015460

Oil Type: VOLVO 10W40

### SAMPLE INFORMATION

Sample Number	VPA015460	---	---	---
Sample Date	21 Nov 2023	---	---	---
Machine Hours	59	---	---	---
Oil Hours	59	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

### OIL CONDITION

Base Number (BN)	mg KOH/g	█ 14.6	---	---	---
Oxidation (PA)	%	14	---	---	---

### CONTAMINATION

Water	%	◆ 2.78	---	---	---
Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	17	---	---	---
Sulfation (PA)	%	5	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	▲ 115	---	---	---
Sodium	ppm	▲ 82	---	---	---
Potassium	ppm	▲ 51	---	---	---

### WEAR METALS

Iron	ppm	█ 47	---	---	---
Copper	ppm	█ 183	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	▲ 14	---	---	---
Chromium	ppm	█ 6	---	---	---
Molybdenum	ppm	36	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	█ <1	---	---	---
Manganese	ppm	26	---	---	---
Vanadium	ppm	<1	---	---	---

### ADDITIVES

Calcium	ppm	2392	---	---	---
Magnesium	ppm	51	---	---	---
Zinc	ppm	747	---	---	---
Phosphorus	ppm	690	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	16	---	---	---

**Hagadone Hospitality Co.**  
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### Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform a viscosity test. All component wear rates are normal. Sodium and/or potassium levels are high. Appearance is milky. There is a high concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

**Depot:** VP434653  
**Unique No:** 10769474  
**Signed:** Jonathan Hester  
**Report Date:** 06 Dec 2023

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## GRAPHS

