

# OIL ANALYSIS REPORT

# VOLVO PENTA

**JIM SHAFER 81530617 VOLVO PENTA A1143332 - PORT DIESEL ENGINE**

**Sample No:** VPA060586

**Oil Type:** VOLVO PENTA SAE 15W40

## SAMPLE INFORMATION

Sample Number	<b>VPA060586</b>	VPA044823	---	---
Sample Date	<b>24 Oct 2023</b>	10 Nov 2022	---	---
Machine Hours	<b>113</b>	70	---	---
Oil Hours	<b>40</b>	70	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.4</b>	13.0	---	---
Base Number (BN)	mg KOH/g	<b>9.8</b>	11.6	---	---
Oxidation (PA)	%	<b>52</b>	62	---	---

## CONTAMINATION

Soot %	%	<b>0.1</b>	0.1	---	---
Nitration (PA)	%	<b>38</b>	46	---	---
Sulfation (PA)	%	<b>49</b>	57	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	<1.0	---	---
Silicon	ppm	<b>7</b>	21	---	---
Sodium	ppm	<b>2</b>	2	---	---
Potassium	ppm	<b>1</b>	0	---	---

## Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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.

## WEAR METALS

Iron	ppm	<b>4</b>	12	---	---
Copper	ppm	<b>9</b>	17	---	---
Lead	ppm	<b>4</b>	6	---	---
Tin	ppm	<b>0</b>	2	---	---
Aluminum	ppm	<b>4</b>	6	---	---
Chromium	ppm	<b>&lt;1</b>	1	---	---
Molybdenum	ppm	<b>58</b>	60	---	---
Nickel	ppm	<b>2</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	<1	---	---
Manganese	ppm	<b>&lt;1</b>	<1	---	---
Vanadium	ppm	<b>0</b>	0	---	---

## ADDITIVES

Calcium	ppm	<b>1033</b>	1184	---	---
Magnesium	ppm	<b>988</b>	870	---	---
Zinc	ppm	<b>1311</b>	1179	---	---
Phosphorus	ppm	<b>1058</b>	1036	---	---
Barium	ppm	<b>0</b>	0	---	---
Boron	ppm	<b>2</b>	12	---	---

**Depot:** VP153549  
**Unique No:** 10722503  
**Signed:** Sean Felton  
**Report Date:** 01 Nov 2023

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PENTA**

## GRAPHS

