

# OIL ANALYSIS REPORT



**EVAN LIN DANIEL/502923 CUMMINS E190570167 - GENSET**

**Sample No:** VPA053011

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

## SAMPLE INFORMATION

Sample Number	<b>VPA053011</b>	VPA045679	VPA035138	---
Sample Date	<b>17 Apr 2024</b>	24 May 2023	13 Jan 2022	---
Machine Hours	<b>492</b>	443	356	---
Oil Hours	<b>0</b>	0	356	---
Oil Changed	<b>Changed</b>	Changed	Not Changd	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.1	13.3	---
Base Number (BN)	mg KOH/g	<b>10.0</b>	9.3	8.0	---
Oxidation (PA)	%	<b>71</b>	65	73	---

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.1</b>	0.1	0.1	---
Nitration (PA)	%	<b>50</b>	67	89	---
Sulfation (PA)	%	<b>57</b>	55	58	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>7</b>	9	9	---
Sodium	ppm	<b>&lt;1</b>	7	4	---
Potassium	ppm	<b>2</b>	2	4	---

## 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 suitable for further service.

## WEAR METALS

Iron	ppm	<b>3</b>	22	9	---
Copper	ppm	<b>2</b>	7	11	---
Lead	ppm	<b>&lt;1</b>	1	<1	---
Tin	ppm	<b>&lt;1</b>	<1	<1	---
Aluminum	ppm	<b>2</b>	4	4	---
Chromium	ppm	<b>&lt;1</b>	<1	<1	---
Molybdenum	ppm	<b>45</b>	37	10	---
Nickel	ppm	<b>0</b>	<1	<1	---
Titanium	ppm	<b>&lt;1</b>	<1	<1	---
Silver	ppm	<b>0</b>	<1	<1	---
Manganese	ppm	<b>&lt;1</b>	1	<1	---
Vanadium	ppm	<b>&lt;1</b>	<1	<1	---

## ADDITIVES

Calcium	ppm	<b>1400</b>	1288	1520	---
Magnesium	ppm	<b>663</b>	860	721	---
Zinc	ppm	<b>996</b>	1087	961	---
Phosphorus	ppm	<b>890</b>	900	782	---
Barium	ppm	<b>2</b>	0	0	---
Boron	ppm	<b>45</b>	27	63	---

**Depot:** VP794951  
**Unique No:** 11022481  
**Signed:** Sean Felton  
**Report Date:** 14 May 2024

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**VOLVO  
PENTA**

## GRAPHS

