

# OIL ANALYSIS REPORT

# VOLVO PENTA

## DANIEL VOLVO PENTA A1121385 - CENTER GASOLINE ENGINE

**Sample No:** VPA036928  
**Oil Type:** VOLVO 10W40 SYNTHETIC

### SAMPLE INFORMATION

Sample Number	<b>VPA036928</b>	VPA046365	VPA044761	---
Sample Date	<b>12 Oct 2023</b>	13 Jul 2023	15 Nov 2022	---
Machine Hours	<b>92</b>	80	70	---
Oil Hours	<b>12</b>	10	26	---
Oil Changed	<b>Not Changd</b>	Not Changd	Changed	---
Sample Status	<b>MARGINAL</b>	ABNORMAL	ATTENTION	---

**CHICAGO YACHT WORKS**  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.6</b>	11.9	11.3	---
Base Number (BN)	mg KOH/g	<b>7.2</b>	7.4	8.6	---
Oxidation (PA)	%	<b>8</b>	9	11	---

### CONTAMINATION

Soot %	%	<b>0</b>	0	0.1	---
Nitration (PA)	%	<b>5</b>	7	8	---
Sulfation (PA)	%	<b>9</b>	9	11	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>3.5</b>	8.7	3.7	---
Silicon	ppm	<b>12</b>	26	55	---
Sodium	ppm	<b>&lt;1</b>	4	0	---
Potassium	ppm	<b>&lt;1</b>	2	5	---

### WEAR METALS

Iron	ppm	<b>4</b>	16	21	---
Copper	ppm	<b>19</b>	46	84	---
Lead	ppm	<b>0</b>	0	<1	---
Tin	ppm	<b>&lt;1</b>	<1	<1	---
Aluminum	ppm	<b>&lt;1</b>	2	2	---
Chromium	ppm	<b>&lt;1</b>	<1	2	---
Molybdenum	ppm	<b>36</b>	37	39	---
Nickel	ppm	<b>0</b>	0	0	---
Titanium	ppm	<b>0</b>	0	0	---
Silver	ppm	<b>0</b>	0	0	---
Manganese	ppm	<b>2</b>	5	9	---
Vanadium	ppm	<b>0</b>	0	0	---

### ADDITIVES

Calcium	ppm	<b>1675</b>	1852	2024	---
Magnesium	ppm	<b>23</b>	15	17	---
Zinc	ppm	<b>747</b>	815	782	---
Phosphorus	ppm	<b>659</b>	699	667	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>13</b>	0	5	---

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

**Depot:** VP1080862  
**Unique No:** 10714088  
**Signed:** Jonathan Hester  
**Report Date:** 01 Nov 2023

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PENTA**

## GRAPHS

