

# OIL ANALYSIS REPORT

# VOLVO PENTA

## LEOR LANDA VOLVO PENTA A1112236 - PORT DIESEL ENGINE

Sample No: VPA043910

Oil Type: SHELL ROTELLA T 15W40

### SAMPLE INFORMATION

Sample Number	VPA043910	VPA043978	VPA043616	---
Sample Date	06 Dec 2023	04 Nov 2022	04 Nov 2021	---
Machine Hours	295	242	177	---
Oil Hours	295	242	177	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

**Larry's Lighthouse Marina**  
1250  
AQUEBOGUE, NY  
US 11931  
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T: x  
F: x

### OIL CONDITION

Visc @ 100°C	cSt	█ 12.5	█ 14.1	█ 13.0	---
Base Number (BN)	mg KOH/g	█ 8.6	█ 10	---	---
Oxidation (PA)	%	46	72	82	---

### CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	█ 0.2	█ 0.2	█ 0.2	---
Nitration (PA)	%	38	53	45	---
Sulfation (PA)	%	47	61	63	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	█ 5	█ 4	█ 10	---
Sodium	ppm	█ 1	█ 1	█ 3	---
Potassium	ppm	█ 3	█ 7	█ 1	---

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. 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	█ 9	█ 13	█ 15	---
Copper	ppm	█ 4	█ 4	█ 8	---
Lead	ppm	█ <1	█ 2	█ 3	---
Tin	ppm	█ <1	█ <1	█ 1	---
Aluminum	ppm	█ 1	█ 1	█ 2	---
Chromium	ppm	█ <1	█ <1	█ 1	---
Molybdenum	ppm	█ 54	█ 8	█ 40	---
Nickel	ppm	█ 0	█ 1	█ 2	---
Titanium	ppm	█ 0	█ 0	█ 0	---
Silver	ppm	█ 0	█ 0	█ <1	---
Manganese	ppm	█ <1	█ <1	█ <1	---
Vanadium	ppm	0	0	0	---

### ADDITIVES

Calcium	ppm	█ 2332	█ 2103	█ 1658	---
Magnesium	ppm	█ 24	87	█ 483	---
Zinc	ppm	█ 1187	█ 1151	█ 1068	---
Phosphorus	ppm	█ 971	█ 972	█ 954	---
Barium	ppm	█ 0	█ 0	█ 0	---
Boron	ppm	█ 103	█ 157	█ 71	---

**Depot:** VP610438  
**Unique No:** 10792815  
**Signed:** Don Baldrige  
**Report Date:** 20 Dec 2023

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PENTA**

## GRAPHS

