

# OIL ANALYSIS REPORT

# VOLVO PENTA

**NADINE URUIOLI BEN VYEMURA 2300474 VOLVO PENTA 7008556890 - PORT DIESEL ENGINE**

**Sample No:** VPA049691

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

## SAMPLE INFORMATION

Sample Number	VPA049691	---	---	---
Sample Date	15 Sep 2023	---	---	---
Machine Hours	37	---	---	---
Oil Hours	37	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

## OIL CONDITION

Visc @ 100°C	cSt	█ 13.2	---	---	---
Base Number (BN)	mg KOH/g	█ 8.4	---	---	---
Oxidation (PA)	%	56	---	---	---

## CONTAMINATION

Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	43	---	---	---
Sulfation (PA)	%	56	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 22	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ 1	---	---	---

## WEAR METALS

Iron	ppm	█ 9	---	---	---
Copper	ppm	█ 11	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 115	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---

## ADDITIVES

Calcium	ppm	█ 1702	---	---	---
Magnesium	ppm	█ 516	---	---	---
Zinc	ppm	█ 889	---	---	---
Phosphorus	ppm	█ 731	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 316	---	---	---

**Helmuts Marine Service**  
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SERVICE@HELMUTSMARINE.COM  
T: x:  
F: x:

## 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 suitable for further service.

**Depot:** VP152741  
**Unique No:** 10661541  
**Signed:** Doug Bogart  
**Report Date:** 26 Sep 2023

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## GRAPHS

