

# OIL ANALYSIS REPORT

# VOLVO PENTA

**CHRIS LEIER 502453 VOLVO PENTA 70112005160 - STARBOARD DIESEL ENGINE**

**Sample No:** VPA059038

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

## SAMPLE INFORMATION

Sample Number	VPA059038	---	---	---
Sample Date	10 Oct 2023	---	---	---
Machine Hours	216	---	---	---
Oil Hours	100	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	ATTENTION	---	---	---

**Endor Marine LLC - Coastal Marine - 152124**  
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## OIL CONDITION

Visc @ 100°C	cSt	▲ 12.4	---	---	---
Base Number (BN)	mg KOH/g	■ 9.3	---	---	---
Oxidation (PA)	%	55	---	---	---

## CONTAMINATION

Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	43	---	---	---
Sulfation (PA)	%	51	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 1.2	---	---	---
Silicon	ppm	■ 13	---	---	---
Sodium	ppm	■ 1	---	---	---
Potassium	ppm	■ 4	---	---	---

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

## WEAR METALS

Iron	ppm	■ 5	---	---	---
Copper	ppm	■ 16	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 1	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 62	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	■ <1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	<1	---	---	---

## ADDITIVES

Calcium	ppm	■ 1062	---	---	---
Magnesium	ppm	■ 974	---	---	---
Zinc	ppm	■ 1234	---	---	---
Phosphorus	ppm	■ 1030	---	---	---
Barium	ppm	■ 12	---	---	---
Boron	ppm	■ 11	---	---	---

**Depot:** VP794951  
**Unique No:** 10695908  
**Signed:** Angela Borella  
**Report Date:** 17 Oct 2023

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## GRAPHS

