

# OIL ANALYSIS REPORT

# VOLVO PENTA

**CARLA STRATFORD DILLON WESTERBEKE 2125367 - STARBOARD GENSET**

**Sample No:** VPA059056

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

## SAMPLE INFORMATION

Sample Number	VPA059056	---	---	---
Sample Date	19 Oct 2023	---	---	---
Machine Hours	33	---	---	---
Oil Hours	33	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

**Endor Marine LLC - Coastal Marine - 152124**  
4300 11th Ave. NW  
SEATTLE, WA  
US 98107  
Contact: WILLOW YANARELLA  
service@coastalmarineengine.com  
T: (206)784-3703  
F: (206)784-8823

## OIL CONDITION

Visc @ 100°C	cSt	▲ 11.4	---	---	---
Base Number (BN)	mg KOH/g	■ 6.9	---	---	---
Oxidation (PA)	%	27	---	---	---

## CONTAMINATION

Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	34	---	---	---
Sulfation (PA)	%	38	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 1.1	---	---	---
Silicon	ppm	■ 36	---	---	---
Sodium	ppm	■ 6	---	---	---
Potassium	ppm	■ 0	---	---	---

## WEAR METALS

Iron	ppm	■ 10	---	---	---
Copper	ppm	■ 8	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 31	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	■ 1656	---	---	---
Magnesium	ppm	■ 121	---	---	---
Zinc	ppm	■ 865	---	---	---
Phosphorus	ppm	■ 583	---	---	---
Barium	ppm	■ 4	---	---	---
Boron	ppm	■ 146	---	---	---

## Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Fuel content negligible. No other contaminants were detected 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.

**Depot:** VP794951  
**Unique No:** 10711556  
**Signed:** Sean Felton  
**Report Date:** 27 Oct 2023

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

