

# OIL ANALYSIS REPORT



**DAVE HOLT PATRICK/502207-5250 VOLVO PENTA A657920 - PORT DIESEL ENGINE**

**Sample No:** VPA062547

**Oil Type:** VOLVO VDS-4.5 Premium Motor Oil 15W40

## SAMPLE INFORMATION

Sample Number	<b>VPA062547</b>	VPA055657	---	---
Sample Date	<b>21 May 2024</b>	07 Jul 2023	---	---
Machine Hours	<b>467</b>	419	---	---
Oil Hours	<b>0</b>	0	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

**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	<b>13.7</b>	13.8	---	---
Base Number (BN)	mg KOH/g	<b>9.6</b>	9.1	---	---
Oxidation (PA)	%	<b>59</b>	55	---	---

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Soot %	%	<b>0.1</b>	0.2	---	---
Nitration (PA)	%	<b>53</b>	67	---	---
Sulfation (PA)	%	<b>53</b>	52	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	<1.0	---	---
Silicon	ppm	<b>6</b>	4	---	---
Sodium	ppm	<b>1</b>	2	---	---
Potassium	ppm	<b>2</b>	6	---	---

## Diagnosis

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. 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.

## WEAR METALS

Iron	ppm	<b>10</b>	11	---	---
Copper	ppm	<b>5</b>	9	---	---
Lead	ppm	<b>1</b>	2	---	---
Tin	ppm	<b>&lt;1</b>	<1	---	---
Aluminum	ppm	<b>2</b>	2	---	---
Chromium	ppm	<b>&lt;1</b>	<1	---	---
Molybdenum	ppm	<b>54</b>	19	---	---
Nickel	ppm	<b>1</b>	2	---	---
Titanium	ppm	<b>&lt;1</b>	<1	---	---
Silver	ppm	<b>&lt;1</b>	0	---	---
Manganese	ppm	<b>&lt;1</b>	<1	---	---
Vanadium	ppm	<b>&lt;1</b>	<1	---	---

## ADDITIVES

Calcium	ppm	<b>1106</b>	1270	---	---
Magnesium	ppm	<b>915</b>	797	---	---
Zinc	ppm	<b>1215</b>	962	---	---
Phosphorus	ppm	<b>974</b>	792	---	---
Barium	ppm	<b>0</b>	0	---	---
Boron	ppm	<b>10</b>	66	---	---

**Depot:** VP794951  
**Unique No:** 11045494  
**Signed:** Sean Felton  
**Report Date:** 28 May 2024

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

