

# OIL ANALYSIS REPORT



## CRAIG CHRISTIANSEN 45112 VOLVO PENTA A1087460 - STARBOARD DIESEL ENGINE

**Sample No:** VPA054023  
**Oil Type:** VOLVO PENTA SAE 15W40

### SAMPLE INFORMATION

Sample Number	<b>VPA054023</b>	VPA056950	VPA042848	---
Sample Date	<b>25 Jun 2024</b>	15 Jun 2023	04 Aug 2022	---
Machine Hours	<b>582</b>	477	360	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	N/A	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

**COASTAL CAROLINA YACHT SALES**  
 145 LOCKWOOD BLVD  
 CHARLESTON, SC  
 US 29403  
 Contact: STEVE VASAS  
 steve@ccyachtsales.com  
 T:  
 F:

### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.3	13.2	---
Base Number (BN)	mg KOH/g	<b>10.0</b>	9.8	11.0	---
Oxidation (PA)	%	<b>55</b>	62	61	---

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.4</b>	0.6	0.5	---
Nitration (PA)	%	<b>49</b>	52	58	---
Sulfation (PA)	%	<b>51</b>	56	59	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>4</b>	5	8	---
Sodium	ppm	<b>1</b>	<1	2	---
Potassium	ppm	<b>&lt;1</b>	0	0	---

### 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	<b>16</b>	21	20	---
Copper	ppm	<b>5</b>	6	10	---
Lead	ppm	<b>1</b>	2	2	---
Tin	ppm	<b>&lt;1</b>	<1	1	---
Aluminum	ppm	<b>2</b>	4	4	---
Chromium	ppm	<b>&lt;1</b>	<1	1	---
Molybdenum	ppm	<b>59</b>	61	59	---
Nickel	ppm	<b>&lt;1</b>	<1	<1	---
Titanium	ppm	<b>0</b>	0	0	---
Silver	ppm	<b>0</b>	0	<1	---
Manganese	ppm	<b>0</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	0	---

### ADDITIVES

Calcium	ppm	<b>1050</b>	1044	1063	---
Magnesium	ppm	<b>928</b>	966	938	---
Zinc	ppm	<b>1182</b>	1234	1261	---
Phosphorus	ppm	<b>997</b>	1009	1017	---
Barium	ppm	<b>0</b>	0	<1	---
Boron	ppm	<b>2</b>	<1	6	---

**Depot:** VP568144  
**Unique No:** 11110440  
**Signed:** Don Baldrige  
**Report Date:** 05 Jul 2024

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# VOLVO PENTA

## GRAPHS

