

# OIL ANALYSIS REPORT

# VOLVO PENTA

## VOLVO 2013613040 - STARBOARD DIESEL ENGINE

Sample No: VPA056384

Oil Type: VOLVO PENTA SAE 15W40

### SAMPLE INFORMATION

Sample Number	VPA056384	VPA044838	VPA010757	---
Sample Date	17 Jan 2024	15 Feb 2023	13 Jan 2022	---
Machine Hours	1000	830	750	---
Oil Hours	0	130	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

FDDA FT PIERCE - POWER CENTER

FORT PIERCE, FL  
US

Contact: KYLE GRASER  
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### OIL CONDITION

Visc @ 100°C	cSt	█ 13.1	█ 13.0	█ 13.4	---
Base Number (BN)	mg KOH/g	█ 8.9	█ 9.7	█ 10.2	---
Oxidation (PA)	%	55	57	66	---

### 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.

### CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	█ 0.5	█ 0.5	█ 0.8	---
Nitration (PA)	%	53	57	71	---
Sulfation (PA)	%	53	55	62	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	█ 4	█ 6	█ 7	---
Sodium	ppm	█ 0	█ 1	█ 0	---
Potassium	ppm	█ 2	█ 2	█ 2	---

### WEAR METALS

Iron	ppm	█ 8	█ 12	█ 20	---
Copper	ppm	█ 2	█ 1	█ 2	---
Lead	ppm	█ 1	█ <1	█ 1	---
Tin	ppm	█ 1	█ <1	█ 1	---
Aluminum	ppm	█ 2	█ <1	█ 5	---
Chromium	ppm	█ <1	█ <1	█ <1	---
Molybdenum	ppm	█ 60	█ 61	█ 66	---
Nickel	ppm	█ 1	█ 0	█ 0	---
Titanium	ppm	█ <1	█ 0	█ <1	---
Silver	ppm	█ 0	█ 0	█ 0	---
Manganese	ppm	█ <1	█ <1	█ <1	---
Vanadium	ppm	<1	0	0	---

### ADDITIVES

Calcium	ppm	█ 994	█ 1098	█ 1170	---
Magnesium	ppm	█ 965	█ 946	█ 1039	---
Zinc	ppm	█ 1191	█ 1252	█ 1167	---
Phosphorus	ppm	█ 943	█ 1039	█ 1119	---
Barium	ppm	█ 1	█ 0	█ 0	---
Boron	ppm	█ 2	█ 0	█ 26	---

Depot: VP208659

Unique No: 10844807

Signed: Sean Felton

Report Date: 25 Jan 2024

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## GRAPHS

