

OIL ANALYSIS REPORT

**VOLVO
PENTA**

BOB HITT GB5406 VOLVO PENTA 70112013422 - STARBOARD DIESEL ENGINE

Sample No: VPA036503

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA036503	---	---	---
Sample Date	11 Oct 2023	---	---	---
Machine Hours	378	---	---	---
Oil Hours	378	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

GRAND BANKS

450 SW SALEM RD

STUART, FL

US 34994

Contact: ROBERT ANTONA

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F:

OIL CONDITION

Visc @ 100°C	cSt	█ 12.4	---	---	---
Base Number (BN)	mg KOH/g	█ 8.2	---	---	---
Oxidation (PA)	%	56	---	---	---

CONTAMINATION

Soot %	%	█ 0.8	---	---	---
Nitration (PA)	%	59	---	---	---
Sulfation (PA)	%	55	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	█ 0.9	---	---	---
Silicon	ppm	█ 12	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ 0	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. 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	█ 21	---	---	---
Copper	ppm	█ 58	---	---	---
Lead	ppm	█ 2	---	---	---
Tin	ppm	█ 1	---	---	---
Aluminum	ppm	█ 3	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 57	---	---	---
Nickel	ppm	█ 1	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ <1	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	█ 1056	---	---	---
Magnesium	ppm	█ 915	---	---	---
Zinc	ppm	█ 1117	---	---	---
Phosphorus	ppm	█ 957	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 2	---	---	---

Depot: VP531377

Unique No: 10696484

Signed: Don Baldrige

Report Date: 17 Oct 2023

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GRAPHS

