

OIL ANALYSIS REPORT

VOLVO PENTA

FRANK C GT6003 VOLVO PENTA 70112003023 - PORT DIESEL ENGINE

Sample No: VPA047235
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA047235	VCP042092	---	---
Sample Date	13 Oct 2023	30 Mar 2023	---	---
Machine Hours	795	590	---	---
Oil Hours	200	85	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	MARGINAL	ATTENTION	---	---

GRAND BANKS
 450 SW SALEM RD
 STUART, FL
 US 34994
 Contact: ROBERT ANTONA
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 F:

OIL CONDITION

Visc @ 100°C	cSt	█ 12.3	▲ 12.3	---	---
Base Number (BN)	mg KOH/g	█ 5.5	█ 9.6	---	---
Oxidation (PA)	%	59	55	---	---

CONTAMINATION

Soot %	%	█ 1.2	█ 0.4	---	---
Nitration (PA)	%	73	49	---	---
Sulfation (PA)	%	57	53	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	█ 1.3	---	---
Silicon	ppm	█ 7	█ 5	---	---
Sodium	ppm	█ 1	█ 1	---	---
Potassium	ppm	█ 0	█ <1	---	---

WEAR METALS

Iron	ppm	█ 29	█ 5	---	---
Copper	ppm	▲ 133	█ 16	---	---
Lead	ppm	█ <1	█ <1	---	---
Tin	ppm	█ 1	█ <1	---	---
Aluminum	ppm	█ 1	█ <1	---	---
Chromium	ppm	█ <1	█ 0	---	---
Molybdenum	ppm	█ 64	█ 60	---	---
Nickel	ppm	█ 2	█ 0	---	---
Titanium	ppm	█ 0	█ 0	---	---
Silver	ppm	█ <1	█ 0	---	---
Manganese	ppm	█ <1	█ <1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	█ 1190	█ 1141	---	---
Magnesium	ppm	█ 862	981	---	---
Zinc	ppm	█ 1265	█ 1284	---	---
Phosphorus	ppm	█ 1063	█ 1066	---	---
Barium	ppm	█ 1	█ 0	---	---
Boron	ppm	█ 5	█ <1	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other 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.

Depot: VP531377
Unique No: 10699458
Signed: Doug Bogart
Report Date: 18 Oct 2023

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**VOLVO
PENTA**

GRAPHS

