

OIL ANALYSIS REPORT

**VOLVO
PENTA**

TIM CASE 23-2745 VOLVO PENTA 2013386461 - PORT DIESEL ENGINE

Sample No: VPA057480

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA057480	VPA040730	---	---
Sample Date	20 Nov 2023	12 Sep 2022	---	---
Machine Hours	1655	1531	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---

Outstanding Marine

PO Box 274
GALENA, MD
US 21635
Contact: Ronda Bolinger
rlwb@verizon.net
T:
F:

OIL CONDITION

Visc @ 100°C	cSt	13.8	13.4	---	---
Base Number (BN)	mg KOH/g	7.4	10.9	---	---
Oxidation (PA)	%	62	57	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.3	0.2	---	---
Nitration (PA)	%	51	46	---	---
Sulfation (PA)	%	54	55	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	2	4	---	---
Sodium	ppm	<1	1	---	---
Potassium	ppm	4	<1	---	---

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 suitable for further service.

WEAR METALS

Iron	ppm	2	3	---	---
Copper	ppm	0	<1	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	0	<1	---	---
Aluminum	ppm	<1	<1	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	8	61	---	---
Nickel	ppm	0	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	0	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	2123	1036	---	---
Magnesium	ppm	152	881	---	---
Zinc	ppm	1305	1241	---	---
Phosphorus	ppm	1040	1033	---	---
Barium	ppm	0	0	---	---
Boron	ppm	142	2	---	---

Depot: VP153685
Unique No: 10767882
Signed: Sean Felton
Report Date: 05 Dec 2023

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GRAPHS

