

OIL ANALYSIS REPORT

VOLVO PENTA

NADINE URUIOLI LUZAICH VOLVO PENTA A 1099937 - STARBOARD DIESEL ENGINE

Sample No: VPA045766

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA045766	---	---	---
Sample Date	08 Aug 2023	---	---	---
Machine Hours	161	---	---	---
Oil Hours	161	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	NORMAL	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 13.2	---	---	---
Base Number (BN)	mg KOH/g	█ 10.3	---	---	---
Oxidation (PA)	%	56	---	---	---

CONTAMINATION

Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	43	---	---	---
Sulfation (PA)	%	53	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 8	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ 2	---	---	---

WEAR METALS

Iron	ppm	█ 23	---	---	---
Copper	ppm	█ 6	---	---	---
Lead	ppm	█ 2	---	---	---
Tin	ppm	█ < 1	---	---	---
Aluminum	ppm	█ 4	---	---	---
Chromium	ppm	█ 1	---	---	---
Molybdenum	ppm	█ 65	---	---	---
Nickel	ppm	█ < 1	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ < 1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1122	---	---	---
Magnesium	ppm	█ 958	---	---	---
Zinc	ppm	█ 1279	---	---	---
Phosphorus	ppm	█ 1053	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 38	---	---	---

Helmut's Marine Service

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SERVICE@HELMUTSMARINE.COM
T: x:
F: x:

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.

Depot: VP152741
Unique No: 10605768
Signed: Don Baldrige
Report Date: 17 Aug 2023

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GRAPHS

