

OIL ANALYSIS REPORT

**VOLVO
PENTA**

ERIC FRANK KOHLER 33F4GMFN0005 - STARBOARD GENSET

Sample No: VPA048418

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA048418	VPA046806	---	---
Sample Date	20 Sep 2023	07 Apr 2022	---	---
Machine Hours	1969	967	---	---
Oil Hours	0	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.3	█ 15.4	---	---
Base Number (BN)	mg KOH/g	█ 9.2	█ 10.0	---	---
Oxidation (PA)	%	78	57	---	---

CONTAMINATION

Soot %	%	█ 0.2	█ 0.3	---	---
Nitration (PA)	%	65	65	---	---
Sulfation (PA)	%	58	55	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 5	█ 8	---	---
Sodium	ppm	█ 4	█ 3	---	---
Potassium	ppm	█ <1	█ 3	---	---

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	█ 9	█ 14	---	---
Copper	ppm	█ 5	█ 5	---	---
Lead	ppm	█ <1	█ <1	---	---
Tin	ppm	█ 0	█ <1	---	---
Aluminum	ppm	█ 0	█ 2	---	---
Chromium	ppm	█ <1	█ 2	---	---
Molybdenum	ppm	█ 33	█ 5	---	---
Nickel	ppm	█ 0	█ 0	---	---
Titanium	ppm	█ <1	█ <1	---	---
Silver	ppm	█ 0	<1	---	---
Manganese	ppm	█ <1	█ <1	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	█ 1658	█ 1446	---	---
Magnesium	ppm	█ 551	█ 743	---	---
Zinc	ppm	█ 955	█ 1155	---	---
Phosphorus	ppm	█ 775	█ 1043	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 65	█ 125	---	---

Depot: VPCYMPOM
Unique No: 10661549
Signed: Doug Bogart
Report Date: 26 Sep 2023

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GRAPHS

