

OIL ANALYSIS REPORT

VOLVO PENTA

PHIL ARONSON FINALLY KOHLER SGM32M9PN - GENSET

Sample No: VPA062268

Oil Type: {unknown}

SAMPLE INFORMATION

Sample Number	VPA062268	---	---	---
Sample Date	02 Jul 2024	---	---	---
Machine Hours	42	---	---	---
Oil Hours	42	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

North Harbor Diesel Inc
720 30Th Street
ANACORTES, WA
US 98221
Contact: ED MCFARLIN
ed@northharbordiesel.com
T:
F:

OIL CONDITION

Visc @ 100°C	cSt	█ 13.5	---	---	---
Base Number (BN)	mg KOH/g	█ 8.9	---	---	---
Oxidation (PA)	%	82	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	102	---	---	---
Sulfation (PA)	%	59	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	▲ 298	---	---	---
Sodium	ppm	▲ 2674	---	---	---
Potassium	ppm	▲ 120	---	---	---

WEAR METALS

Iron	ppm	▲ 505	---	---	---
Copper	ppm	█ 28	---	---	---
Lead	ppm	█ 6	---	---	---
Tin	ppm	█ 4	---	---	---
Aluminum	ppm	▲ 457	---	---	---
Chromium	ppm	▲ 72	---	---	---
Molybdenum	ppm	56	---	---	---
Nickel	ppm	█ 2	---	---	---
Titanium	ppm	2	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	24	---	---	---
Vanadium	ppm	< 1	---	---	---

ADDITIVES

Calcium	ppm	1187	---	---	---
Magnesium	ppm	1226	---	---	---
Zinc	ppm	1134	---	---	---
Phosphorus	ppm	1004	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	42	---	---	---

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. Sodium and/or potassium levels are high. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: VP179089
Unique No: 1114667
Signed: Jonathan Hester
Report Date: 10 Jul 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

