

OIL ANALYSIS REPORT



LERMAN CUMMINS C080162353 - GENSET

Sample No: VPA059686

Oil Type: SHELL ROTELLA T 15W40

SAMPLE INFORMATION

Sample Number	VPA059686	VPA040971	VPA036058	---
Sample Date	01 Dec 2023	21 Nov 2022	19 Oct 2021	---
Machine Hours	0	140	101	---
Oil Hours	0	10	0	---
Oil Changed	Not Changed	Changed	N/A	---
Sample Status	NORMAL	NORMAL	NORMAL	---

Walstrom Marine - 767948

501 Bay Street
HARBOR SPRINGS, MI
US 49740

Contact: RICK HEINY
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OIL CONDITION

Visc @ 100°C	cSt	█ 14.2	█ 14.52	█ 14.1	---
Base Number (BN)	mg KOH/g	█ 9.1	█ 9.6	---	---
Oxidation (PA)	%	63	71	68	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	█ 0	█ 0.1	█ 0	---
Nitration (PA)	%	51	58	48	---
Sulfation (PA)	%	54	60	58	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	█ 4	█ 4	█ 4	---
Sodium	ppm	█ <1	█ 2	█ 2	---
Potassium	ppm	█ 8	█ 8	█ 9	---

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.

WEAR METALS

Iron	ppm	█ 3	█ 8	█ 4	---
Copper	ppm	█ <1	█ 1	█ <1	---
Lead	ppm	█ 0	█ <1	█ <1	---
Tin	ppm	█ 0	█ <1	█ 0	---
Aluminum	ppm	█ 1	█ 1	█ <1	---
Chromium	ppm	█ <1	█ <1	█ <1	---
Molybdenum	ppm	█ 0	█ 2	█ <1	---
Nickel	ppm	█ 0	█ <1	█ <1	---
Titanium	ppm	0	0	<1	---
Silver	ppm	█ 0	█ 0	0	---
Manganese	ppm	█ 0	█ <1	█ <1	---
Vanadium	ppm	0	<1	0	---

ADDITIVES

Calcium	ppm	█ 2061	█ 2184	█ 2372	---
Magnesium	ppm	█ 12	█ 14	█ 12	---
Zinc	ppm	█ 1067	█ 1164	█ 1090	---
Phosphorus	ppm	█ 892	█ 973	█ 952	---
Barium	ppm	█ 2	█ 0	█ 0	---
Boron	ppm	█ 206	█ 194	█ 179	---

Depot: VP154879

Unique No: 10770129

Signed: Sean Felton

Report Date: 07 Dec 2023

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**VOLVO
PENTA**

GRAPHS

