

OIL ANALYSIS REPORT



LAWSON 520-69 ONAN E180354822 - GENSET

Sample No: VPA057297
Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA057297	VPA037295	---	---
Sample Date	29 Nov 2023	01 Nov 2023	---	---
Machine Hours	439	0	---	---
Oil Hours	0	100	---	---
Oil Changed	N/A	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	13.6	13.5	---	---
Base Number (BN)	mg KOH/g	7.8	8.1	---	---
Oxidation (PA)	%	65	66	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	60	60	---	---
Sulfation (PA)	%	56	56	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	13	15	---	---
Sodium	ppm	2	0	---	---
Potassium	ppm	6	10	---	---

Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. 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	7	10	---	---
Copper	ppm	2	2	---	---
Lead	ppm	0	0	---	---
Tin	ppm	<1	0	---	---
Aluminum	ppm	2	1	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	4	4	---	---
Nickel	ppm	0	<1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	<1	0	---	---
Vanadium	ppm	<1	0	---	---

ADDITIVES

Calcium	ppm	2032	2050	---	---
Magnesium	ppm	21	45	---	---
Zinc	ppm	1125	1138	---	---
Phosphorus	ppm	927	940	---	---
Barium	ppm	0	4	---	---
Boron	ppm	172	213	---	---

Depot: VP153685
Unique No: 10816319
Signed: Sean Felton
Report Date: 04 Jan 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

