

OIL ANALYSIS REPORT



DENNIS MADSEN SAM NORTHERN LIGHTS 7732-50542 - GENSET

Sample No: VPA060038

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA060038	VPA043189	VPA047475	---
Sample Date	27 Feb 2024	07 Feb 2023	14 Mar 2022	---
Machine Hours	241	216	211	---
Oil Hours	0	0	0	---
Oil Changed	Changed	N/A	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.6	13.8	13.7	---
Base Number (BN)	mg KOH/g	9.9	10.0	10.9	---
Oxidation (PA)	%	55	53	58	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	41	39	44	---
Sulfation (PA)	%	50	50	54	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	7	7	5	---
Sodium	ppm	2	<1	2	---
Potassium	ppm	1	1	2	---

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	5	2	5	---
Copper	ppm	1	<1	1	---
Lead	ppm	<1	<1	<1	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	2	<1	2	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	60	57	49	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	<1	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	<1	0	<1	---

ADDITIVES

Calcium	ppm	1030	1081	1072	---
Magnesium	ppm	954	990	917	---
Zinc	ppm	1202	1369	1201	---
Phosphorus	ppm	1074	1063	976	---
Barium	ppm	0	0	0	---
Boron	ppm	5	4	22	---

Depot: VP794951
Unique No: 10910357
Signed: Sean Felton
Report Date: 05 Mar 2024

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VOLVO PENTA

GRAPHS

