

OIL ANALYSIS REPORT



JMADRA NORTHERN LIGHTS JMADRA (S/N NOT GIVEN) - GENSET

Sample No: VPA036390
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA036390	---	---	---
Sample Date	15 Nov 2023	---	---	---
Machine Hours	501	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.4	---	---	---
Base Number (BN)	mg KOH/g	■ 9.5	---	---	---
Oxidation (PA)	%	63	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	60	---	---	---
Sulfation (PA)	%	52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	▲ 4.4	---	---	---
Silicon	ppm	■ 7	---	---	---
Sodium	ppm	■ 1	---	---	---
Potassium	ppm	■ 18	---	---	---

Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

WEAR METALS

Iron	ppm	■ 7	---	---	---
Copper	ppm	■ 12	---	---	---
Lead	ppm	■ 2	---	---	---
Tin	ppm	■ 0	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 56	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	■ 1446	---	---	---
Magnesium	ppm	■ 550	---	---	---
Zinc	ppm	■ 1031	---	---	---
Phosphorus	ppm	■ 876	---	---	---
Barium	ppm	■ 9	---	---	---
Boron	ppm	■ 79	---	---	---

Depot: VP1298996
Unique No: 10752367
Signed: Jonathan Hester
Report Date: 24 Nov 2023

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**VOLVO
PENTA**

GRAPHS

