

OIL ANALYSIS REPORT



BARDIN NORTHERN LIGHTS BARDIN (S/N NOT GIVEN) - PORT GENSET

Sample No: VPA954170
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA954170	VPA041189	---	---
Sample Date	08 May 2024	05 Dec 2022	---	---
Machine Hours	0	424	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	ABNORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	14.0	13.0	---	---
Base Number (BN)	mg KOH/g	7.5	10.9	---	---
Oxidation (PA)	%	57	62	---	---

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.2	---	---
Nitration (PA)	%	59	57	---	---
Sulfation (PA)	%	58	58	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	8	8	---	---
Sodium	ppm	3098	2	---	---
Potassium	ppm	114	<1	---	---

WEAR METALS

Iron	ppm	45	14	---	---
Copper	ppm	10	7	---	---
Lead	ppm	2	5	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	6	3	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	27	61	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	1	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1811	1202	---	---
Magnesium	ppm	806	965	---	---
Zinc	ppm	1185	1311	---	---
Phosphorus	ppm	1026	986	---	---
Barium	ppm	1	0	---	---
Boron	ppm	110	1	---	---

Depot: VP1298996
Unique No: 11061881
Signed: Jonathan Hester
Report Date: 13 Jun 2024

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VOLVO PENTA

GRAPHS

