

OIL ANALYSIS REPORT



ADAM SOHN DANIEL/502999 VOLVO PENTA A1139154 - STARBOARD DIESEL ENGINE

Sample No: VPA059329

Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

SAMPLE INFORMATION

Sample Number	VPA059329	VPA045892	---	---
Sample Date	13 May 2024	01 May 2023	---	---
Machine Hours	262	91	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	13.4	13.1	---	---
Base Number (BN)	mg KOH/g	9.4	8.5	---	---
Oxidation (PA)	%	54	61	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.2	0.1	---	---
Nitration (PA)	%	43	42	---	---
Sulfation (PA)	%	50	56	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	8	21	---	---
Sodium	ppm	1	2	---	---
Potassium	ppm	2	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 suitable for further service.

WEAR METALS

Iron	ppm	11	14	---	---
Copper	ppm	6	8	---	---
Lead	ppm	4	1	---	---
Tin	ppm	1	1	---	---
Aluminum	ppm	11	24	---	---
Chromium	ppm	1	2	---	---
Molybdenum	ppm	65	100	---	---
Nickel	ppm	1	1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	<1	4	---	---
Manganese	ppm	<1	1	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	1071	1504	---	---
Magnesium	ppm	848	710	---	---
Zinc	ppm	1079	963	---	---
Phosphorus	ppm	943	792	---	---
Barium	ppm	0	0	---	---
Boron	ppm	45	304	---	---

Depot: VP794951
Unique No: 11032220
Signed: Jonathan Hester
Report Date: 18 May 2024

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GRAPHS

