

OIL ANALYSIS REPORT

VOLVO PENTA

ARKAN CAGLAYAN PATRICK/502632-5250 VOLVO PENTA 2013247911 - STARBOARD DIESEL ENGINE

Sample No: VPA059207

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

SAMPLE INFORMATION

Sample Number	VPA059207	VPA056574	---	---
Sample Date	28 Dec 2023	22 May 2023	---	---
Machine Hours	1193	1166	---	---
Oil Hours	27	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.3	█ 13.1	---	---
Base Number (BN)	mg KOH/g	█ 9.4	█ 9.0	---	---
Oxidation (PA)	%	56	67	---	---

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.

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.1	█ 0.2	---	---
Nitration (PA)	%	44	63	---	---
Sulfation (PA)	%	51	56	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 4	█ 7	---	---
Sodium	ppm	█ 1	█ 4	---	---
Potassium	ppm	█ <1	█ 3	---	---

WEAR METALS

Iron	ppm	█ 0	█ 5	---	---
Copper	ppm	█ 1	█ 3	---	---
Lead	ppm	█ 0	█ <1	---	---
Tin	ppm	█ <1	█ <1	---	---
Aluminum	ppm	█ 1	█ <1	---	---
Chromium	ppm	█ 0	█ <1	---	---
Molybdenum	ppm	█ 53	█ 49	---	---
Nickel	ppm	█ 0	█ <1	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ <1	█ 1	---	---
Vanadium	ppm	0	<1	---	---

ADDITIVES

Calcium	ppm	1001	█ 1197	---	---
Magnesium	ppm	█ 873	876	---	---
Zinc	ppm	█ 1097	█ 999	---	---
Phosphorus	ppm	█ 935	█ 801	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 11	█ 33	---	---

Depot: VP794951
Unique No: 10817252
Signed: Don Baldrige
Report Date: 06 Jan 2024

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GRAPHS

