

OIL ANALYSIS REPORT



MICHAEL ELDRIDGE SAM VOLVO PENTA A1139451 - STARBOARD DIESEL ENGINE

Sample No: VPA059177
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA059177	VPA056580	---	---
Sample Date	05 Mar 2024	23 May 2023	---	---
Machine Hours	390	237	---	---
Oil Hours	151	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.0	█ 13.0	---	---
Base Number (BN)	mg KOH/g	█ 9.8	█ 9.0	---	---
Oxidation (PA)	%	71	65	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.1	█ 0.1	---	---
Nitration (PA)	%	45	57	---	---
Sulfation (PA)	%	59	62	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 9	█ 26	---	---
Sodium	ppm	█ 2	█ 5	---	---
Potassium	ppm	█ <1	█ 4	---	---

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	█ 20	█ 26	---	---
Copper	ppm	█ 7	█ 14	---	---
Lead	ppm	█ 1	█ 4	---	---
Tin	ppm	█ <1	█ 3	---	---
Aluminum	ppm	█ 16	█ 26	---	---
Chromium	ppm	█ 2	█ 3	---	---
Molybdenum	ppm	█ 61	█ 102	---	---
Nickel	ppm	█ 4	█ 4	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ <1	2	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	█ 1646	█ 1664	---	---
Magnesium	ppm	█ 706	█ 619	---	---
Zinc	ppm	█ 1064	█ 936	---	---
Phosphorus	ppm	█ 844	753	---	---
Barium	ppm	█ <1	█ 0	---	---
Boron	ppm	█ 90	█ 322	---	---

Depot: VP794951
Unique No: 10915301
Signed: Don Baldrige
Report Date: 10 Mar 2024

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VOLVO PENTA

GRAPHS

