

OIL ANALYSIS REPORT



BILL SHIELDS SAM VOLVO PENTA A1111410 - STARBOARD DIESEL ENGINE

Sample No: VPA053214
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA053214	VPA035127	---	---
Sample Date	02 Apr 2024	04 Oct 2021	---	---
Machine Hours	0	239	---	---
Oil Hours	106	0	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.6	█ 13.48	---	---
Base Number (BN)	mg KOH/g	█ 10.4	---	---	---
Oxidation (PA)	%	55	65	---	---

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	█ 0.112	---	---
Soot %	%	█ 0.1	█ 0.3	---	---
Nitration (PA)	%	39	48	---	---
Sulfation (PA)	%	51	64	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 4	█ 8	---	---
Sodium	ppm	█ <1	█ 2	---	---
Potassium	ppm	█ 0	█ <1	---	---

WEAR METALS

Iron	ppm	█ 3	█ 11	---	---
Copper	ppm	█ 2	█ 7	---	---
Lead	ppm	█ 0	█ 3	---	---
Tin	ppm	█ 0	█ 1	---	---
Aluminum	ppm	█ <1	█ 4	---	---
Chromium	ppm	█ <1	█ <1	---	---
Molybdenum	ppm	█ 64	█ 123	---	---
Nickel	ppm	█ <1	█ 2	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ 0	█ <1	---	---
Vanadium	ppm	<1	<1	---	---

ADDITIVES

Calcium	ppm	█ 1166	█ 1556	---	---
Magnesium	ppm	1051	█ 638	---	---
Zinc	ppm	█ 1385	█ 841	---	---
Phosphorus	ppm	█ 1125	█ 628	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 4	█ 392	---	---

Depot: VP794951
Unique No: 10956670
Signed: Don Baldrige
Report Date: 05 Apr 2024

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VOLVO PENTA

GRAPHS

