

OIL ANALYSIS REPORT

VOLVO PENTA

SCOTT PITASKY PATRICK/502590-5250 VOLVO PENTA 7008512563 - STARBOARD DIESEL ENGINE

Sample No: VPA059206

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

SAMPLE INFORMATION

Sample Number	VPA059206	---	---	---
Sample Date	03 Jan 2024	---	---	---
Machine Hours	432	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

Endor Marine LLC - Coastal Marine - 152124
4300 11th Ave. NW
SEATTLE, WA
US 98107
Contact: WILLOW YANARELLA
service@coastalmarineengine.com
T: (206)784-3703
F: (206)784-8823

OIL CONDITION

Visc @ 100°C	cSt	█ 13.3	---	---	---
Base Number (BN)	mg KOH/g	█ 9.8	---	---	---
Oxidation (PA)	%	60	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.6	---	---	---
Nitration (PA)	%	59	---	---	---
Sulfation (PA)	%	57	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 13	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 2	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other 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	█ 28	---	---	---
Copper	ppm	▲ 108	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ 1	---	---	---
Molybdenum	ppm	█ 68	---	---	---
Nickel	ppm	█ 4	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ 1	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1145	---	---	---
Magnesium	ppm	1028	---	---	---
Zinc	ppm	█ 1313	---	---	---
Phosphorus	ppm	█ 1026	---	---	---
Barium	ppm	█ 8	---	---	---
Boron	ppm	█ 1	---	---	---

Depot: VP794951
Unique No: 10819350
Signed: Don Baldrige
Report Date: 09 Jan 2024

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GRAPHS

