

OIL ANALYSIS REPORT



320385 YANMAR E04909 - PORT MAIN ENGINE

Sample No: VPA055497
Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMATION

Sample Number	VPA055497	---	---	---
Sample Date	16 Feb 2024	---	---	---
Machine Hours	3075	---	---	---
Oil Hours	2	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	NORMAL	---	---	---

HINDSON MARINE SERVICE INC
 79 CHAMPLAIN ROAD, P.O. BOX 5025
 Penetanguishene, ON
 CA L9M 2G2
 Contact: Stewart McConkey
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 T: (705)549-2004
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OIL CONDITION

Visc @ 100°C	cSt	█ 13.9	---	---	---
Oxidation (PA)	%	65	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0	---	---	---
Nitration (PA)	%	48	---	---	---
Sulfation (PA)	%	55	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 8	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ 6	---	---	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	█ 4	---	---	---
Copper	ppm	█ < 1	---	---	---
Lead	ppm	█ 1	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ < 1	---	---	---
Molybdenum	ppm	█ 9	---	---	---
Nickel	ppm	█ < 1	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 0	---	---	---
Vanadium	ppm	█ 0	---	---	---

ADDITIVES

Calcium	ppm	█ 2015	---	---	---
Magnesium	ppm	█ 60	---	---	---
Zinc	ppm	█ 1035	---	---	---
Phosphorus	ppm	█ 917	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	150	---	---	---

Depot: ROB79PEN
Unique No: 5736000
Signed: Kevin Marson
Report Date: 29 Feb 2024

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VOLVO PENTA

GRAPHS

