

# OIL ANALYSIS REPORT

# VOLVO PENTA

## LERMAN ZF 20119930 - INBOARD - STARBOARD GEARBOX

Sample No: VPA036443  
Oil Type: SHELL ROTELLA T 30

### SAMPLE INFORMATION

Sample Number	VPA036443	VPA039758	VPA035313	---
Sample Date	01 Dec 2023	21 Nov 2022	19 Oct 2021	---
Machine Hours	0	458	424	---
Oil Hours	0	25	0	---
Oil Changed	Not Changd	Changed	N/A	---
Sample Status	NORMAL	NORMAL	NORMAL	---

### Walstrom Marine - 767948

501 Bay Street  
HARBOR SPRINGS, MI  
US 49740  
Contact: RICK HEINY  
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T:  
F:

### OIL CONDITION

Visc @ 40°C	cSt	■ 89.8	■ 94.5	■ 109	---
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### CONTAMINATION

Water	%	■ NEG	■ NEG	■ NEG	---
Silicon	ppm	■ 4	■ 4	■ 4	---
Sodium	ppm	■ 3	■ 2	■ 2	---
Potassium	ppm	■ 0	■ <1	■ 10	---

### Diagnosis

No corrective action is recommended at this time. 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 condition of the oil is acceptable for the time in service.

### WEAR METALS

PQ		■ 13	■ 11	■ 22	---
Iron	ppm	■ 3	■ 6	■ 9	---
Copper	ppm	■ 20	■ 19	■ 30	---
Lead	ppm	■ 0	■ <1	■ 0	---
Tin	ppm	■ 0	■ 0	■ 0	---
Aluminum	ppm	■ 2	■ <1	■ 2	---
Chromium	ppm	■ 0	■ <1	<1	---
Molybdenum	ppm	■ 114	■ 111	■ 84	---
Nickel	ppm	■ 0	■ 0	0	---
Titanium	ppm	■ 0	0	■ <1	---
Silver	ppm	■ 0	0	0	---
Manganese	ppm	■ <1	■ <1	■ <1	---
Vanadium	ppm	■ 0	0	0	---

### ADDITIVES

Calcium	ppm	■ 2551	■ 2573	■ 2215	---
Magnesium	ppm	■ 32	75	■ 275	---
Zinc	ppm	■ 1167	■ 1140	■ 956	---
Phosphorus	ppm	■ 1072	■ 1017	■ 839	---
Barium	ppm	■ 0	■ 0	■ 0	---
Boron	ppm	■ 4	■ 5	■ 11	---

Depot: VP154879  
Unique No: 10775608  
Signed: Sean Felton  
Report Date: 07 Dec 2023

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## GRAPHS

