

# OIL ANALYSIS REPORT



## SIDEBAR H2O VOLVO PENTA 3940021852 (S/N 31940021852) - STARBOARD IPS

**Sample No:** VPA027144  
**Oil Type:** GEAR OIL SAE 75W90

### SAMPLE INFORMATION

Sample Number	VPA027144	VPA040516	VPA030395	---
Sample Date	20 Feb 2024	08 Mar 2022	05 May 2020	---
Machine Hours	643	516	321	---
Oil Hours	0	0	0	---
Oil Changed	N/A	N/A	N/A	---
Sample Status	ABNORMAL	NORMAL	NORMAL	---

**MARINE DIESEL SERVICES INC**  
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### OIL CONDITION

Visc @ 40°C	cSt	█ 105	█ 110	█ 106	---
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### CONTAMINATION

Water	%	▲ 0.315	NEG	NEG	---
Silicon	ppm	█ 15	█ 11	█ 15	---
Sodium	ppm	█ 30	█ 10	█ 3	---
Potassium	ppm	█ 1	█ <1	█ 2	---

### WEAR METALS

PQ		█ 21	█ 22	█ 19	---
Iron	ppm	▲ 259	█ 80	█ 42	---
Copper	ppm	█ 23	█ 13	█ 5	---
Lead	ppm	<1	<1	0	---
Tin	ppm	<1	0	0	---
Aluminum	ppm	█ 6	█ 2	<1	---
Chromium	ppm	█ 2	█ <1	█ <1	---
Molybdenum	ppm	█ 0	█ <1	█ <1	---
Nickel	ppm	█ 3	█ 2	█ <1	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	█ 4	█ 3	█ <1	---
Vanadium	ppm	0	0	0	---

### ADDITIVES

Calcium	ppm	█ 6	█ 6	█ 2	---
Magnesium	ppm	█ 7	█ 6	█ 19	---
Zinc	ppm	█ 32	█ 12	█ 4	---
Phosphorus	ppm	█ 1356	█ 1392	█ 1288	---
Barium	ppm	█ 0	█ 0	█ 0	---
Boron	ppm	█ 242	█ 294	█ 279	---

### Diagnosis

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. Resample at the next service interval to monitor. Gear wear is indicated. There is a moderate concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

**Depot:** VP288530  
**Unique No:** 10903713  
**Signed:** Doug Bogart  
**Report Date:** 01 Mar 2024

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**VOLVO  
PENTA**

## GRAPHS

