

OIL ANALYSIS REPORT

**VOLVO
PENTA**

NAUTILUS MARINE ROWE MERCUISER NAUTILUS MARINE (S/N NOT GIVEN) - PORT GASOLINE ENGINE

Sample No: VPA016492

Oil Type: NOT GIVEN

SAMPLE INFORMATION

Sample Number	VPA016492	---	---	---
Sample Date	01 Jul 2023	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	SEVERE	---	---	---

NAUTILUS MARINE SERVICE

PO BOX 743
KEMAH, TX
US 77565
Contact: MIKE PAINTER
NMSPAINTER@VERIZON.NET
T: (281)474-5402
F:

OIL CONDITION

Visc @ 100°C	cSt	▲ 31.9	---	---	---
Oxidation (PA)	%	32	---	---	---

CONTAMINATION

Water	%	◆ 13.8	---	---	---
Soot %	%	■ 0.6	---	---	---
Nitration (PA)	%	47	---	---	---
Sulfation (PA)	%	0	---	---	---
Glycol	%	0.0	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	▲ 31	---	---	---
Sodium	ppm	▲ 508	---	---	---
Potassium	ppm	▲ 28	---	---	---

WEAR METALS

Iron	ppm	▲ 246	---	---	---
Copper	ppm	■ 54	---	---	---
Lead	ppm	■ 10	---	---	---
Tin	ppm	■ 5	---	---	---
Aluminum	ppm	■ 16	---	---	---
Chromium	ppm	■ 8	---	---	---
Molybdenum	ppm	33	---	---	---
Nickel	ppm	■ 2	---	---	---
Titanium	ppm	1	---	---	---
Silver	ppm	■ 1	---	---	---
Manganese	ppm	6	---	---	---
Vanadium	ppm	< 1	---	---	---

ADDITIVES

Calcium	ppm	1768	---	---	---
Magnesium	ppm	132	---	---	---
Zinc	ppm	747	---	---	---
Phosphorus	ppm	659	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	68	---	---	---

Diagnosis

We advise that you check for the source of water entry. Recommend drain oil if not already done and flush before refilling with oil. Please note that there was too much water present in the oil to perform an accurate viscosity test. Cylinder, crank, or cam shaft wear is indicated. Sodium and/or potassium levels are high. The high sodium (Na) level indicates the possible presence of salt water. There is a high concentration of water present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. Test for glycol is negative. The oil is no longer serviceable due to the presence of contaminants.

Depot: VPNAUKEM
Unique No: 10563124
Signed: Doug Bogart
Report Date: 25 Jul 2023

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GRAPHS

