

OIL ANALYSIS REPORT

**VOLVO
PENTA**

GALVESTON HISTORICAL SOCIETY 38977 YANMAR GALVESTON HISTORICAL SOCIETY (S/N NOT GIVEN) - STARBOARD DIESEL ENGINE

Sample No: VPA036588

Oil Type: SHELL ROTELLA T 15W40

SAMPLE INFORMATION

Sample Number	VPA036588	---	---	---
Sample Date	13 Dec 2023	---	---	---
Machine Hours	5686	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	NORMAL	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 12.9	---	---	---
Base Number (BN)	mg KOH/g	█ 7.3	---	---	---
Oxidation (PA)	%	79	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.5	---	---	---
Nitration (PA)	%	103	---	---	---
Sulfation (PA)	%	57	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	█ 3	---	---	---
Potassium	ppm	█ <1	---	---	---

WEAR METALS

Iron	ppm	█ 12	---	---	---
Copper	ppm	█ 14	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 5	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 77	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 2187	---	---	---
Magnesium	ppm	█ 16	---	---	---
Zinc	ppm	█ 1190	---	---	---
Phosphorus	ppm	█ 941	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	55	---	---	---

TRUE NORTH MARINE

1206 MARINA BAY DR
CLEAR LAKE SHORES, TX
US 77565

Contact: Brian Rogers
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T:
F:

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VP975860

Unique No: 10792819

Signed: Don Baldrige

Report Date: 20 Dec 2023

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GRAPHS

