

# OIL ANALYSIS REPORT

# VOLVO PENTA

**36 FT SARGO 36 FT SARGO VOLVO PENTA A1159641 - STARBOARD DIESEL ENGINE**

**Sample No:** VPA058176

**Oil Type:** DIESEL ENGINE OIL SAE 15W40

## SAMPLE INFORMATION

Sample Number	VPA058176	---	---	---
Sample Date	13 Feb 2024	---	---	---
Machine Hours	144	---	---	---
Oil Hours	144	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	MARGINAL	---	---	---

**North Harbor Diesel Inc**  
720 30Th Street  
ANACORTES, WA  
US 98221  
Contact: ROBBIN MURDOCK  
robbin@northharbordiesel.com  
T: (360)299-1904  
F:

## OIL CONDITION

Visc @ 100°C	cSt	▲ 12.2	---	---	---
Base Number (BN)	mg KOH/g	■ 10.3	---	---	---
Oxidation (PA)	%	78	---	---	---

## Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

## CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	50	---	---	---
Sulfation (PA)	%	61	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.3	---	---	---
Silicon	ppm	■ 24	---	---	---
Sodium	ppm	■ 0	---	---	---
Potassium	ppm	■ 3	---	---	---

## WEAR METALS

Iron	ppm	■ 22	---	---	---
Copper	ppm	■ 14	---	---	---
Lead	ppm	■ 3	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ 1	---	---	---
Molybdenum	ppm	■ 34	---	---	---
Nickel	ppm	■ 2	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	■ 1285	---	---	---
Magnesium	ppm	■ 388	---	---	---
Zinc	ppm	■ 894	---	---	---
Phosphorus	ppm	■ 749	---	---	---
Barium	ppm	■ <1	---	---	---
Boron	ppm	■ 53	---	---	---

**Depot:** VP179089  
**Unique No:** 10888082  
**Signed:** Jonathan Hester  
**Report Date:** 23 Feb 2024

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## GRAPHS

