

# OIL ANALYSIS REPORT



## CEVICHE CATERPILLAR CEVICHE (S/N NOT GIVEN) - STARBOARD DIESEL ENGINE

**Sample No:** VPA021872  
**Oil Type:** VOLVO 10W40

### SAMPLE INFORMATION

Sample Number	VPA021872	---	---	---
Sample Date	30 Dec 2023	---	---	---
Machine Hours	2755	---	---	---
Oil Hours	211	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	ABNORMAL	---	---	---

**Outstanding Marine**  
 PO Box 274  
 GALENA, MD  
 US 21635  
 Contact: Ronda Bolinger  
 rlwb@verizon.net  
 T:  
 F:

### OIL CONDITION

Visc @ 100°C	cSt	▲ 12.4	---	---	---
Base Number (BN)	mg KOH/g	■ 9.3	---	---	---
Oxidation (PA)	%	58	---	---	---

### CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	48	---	---	---
Sulfation (PA)	%	54	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.0	---	---	---
Silicon	ppm	▲ 163	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ <1	---	---	---

### Diagnosis

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. All component wear rates are normal. Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

### WEAR METALS

Iron	ppm	■ 4	---	---	---
Copper	ppm	■ 3	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ 0	---	---	---
Aluminum	ppm	■ 0	---	---	---
Chromium	ppm	■ 0	---	---	---
Molybdenum	ppm	■ 53	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---

### ADDITIVES

Calcium	ppm	■ 1190	---	---	---
Magnesium	ppm	■ 827	---	---	---
Zinc	ppm	■ 1236	---	---	---
Phosphorus	ppm	■ 961	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 16	---	---	---

**Depot:** VP153685  
**Unique No:** 10823680  
**Signed:** Jonathan Hester  
**Report Date:** 15 Jan 2024

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

