

# OIL ANALYSIS REPORT

# VOLVO PENTA

**RICK NORLBY VOLVO PENTA TAMD61A 1101001992-12175 - DIESEL ENGINE**

**Sample No:** VPA060108

**Oil Type:** CHEVRON DELO 400 MULTIGRADE 15W40

## SAMPLE INFORMATION

Sample Number	VPA060108	---	---	---
Sample Date	12 Sep 2023	---	---	---
Machine Hours	5152	---	---	---
Oil Hours	90	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

### Northwest Diesel Power

1325 ROEDER AVE SUITE 103  
BELLINGHAM, WA  
US 98225

Contact: BRANDON ROBERTSON  
parts@nwdieselpower.com

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F:

## OIL CONDITION

Visc @ 100°C	cSt	█ 13.9	---	---	---
Base Number (BN)	mg KOH/g	█ 8.1	---	---	---
Oxidation (PA)	%	71	---	---	---

## CONTAMINATION

Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	82	---	---	---
Sulfation (PA)	%	56	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	▲ 696	---	---	---
Potassium	ppm	▲ 37	---	---	---

## Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

## WEAR METALS

Iron	ppm	▲ 92	---	---	---
Copper	ppm	█ 9	---	---	---
Lead	ppm	█ 11	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ <1	---	---	---
Chromium	ppm	█ 1	---	---	---
Molybdenum	ppm	█ 40	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	█ 1593	---	---	---
Magnesium	ppm	837	---	---	---
Zinc	ppm	█ 1137	---	---	---
Phosphorus	ppm	█ 894	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 165	---	---	---

**Depot:** VP759009

**Unique No:** 10649108

**Signed:** Jonathan Hester

**Report Date:** 20 Sep 2023

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## GRAPHS

