

# OIL ANALYSIS REPORT

**VOLVO  
PENTA**

## MARK THORNDYKE - MER MADE 2.0 VOLVO PENTA 2013989755 - PORT DIESEL ENGINE

**Sample No:** VPA059320  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

### SAMPLE INFORMATION

Sample Number	VPA059320	---	---	---
Sample Date	20 Oct 2023	---	---	---
Machine Hours	342	---	---	---
Oil Hours	90	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

**CHICAGO YACHT WORKS**  
2550 S ASHLAND AVE  
CHICAGO, IL  
US 60608  
Contact: JONATHAN PAIGE  
jonathan@chicagoyachtworks.com  
T: (312)666-6670  
F:

### OIL CONDITION

Visc @ 100°C	cSt	█ 13.7	---	---	---
Base Number (BN)	mg KOH/g	█ 8.0	---	---	---
Oxidation (PA)	%	54	---	---	---

### 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.

### CONTAMINATION

Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	56	---	---	---
Sulfation (PA)	%	50	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 8	---	---	---
Sodium	ppm	█ 1	---	---	---
Potassium	ppm	█ 5	---	---	---

### WEAR METALS

Iron	ppm	█ 2	---	---	---
Copper	ppm	█ 1	---	---	---
Lead	ppm	█ < 1	---	---	---
Tin	ppm	█ < 1	---	---	---
Aluminum	ppm	█ 3	---	---	---
Chromium	ppm	█ 0	---	---	---
Molybdenum	ppm	█ 62	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ < 1	---	---	---
Manganese	ppm	█ < 1	---	---	---
Vanadium	ppm	0	---	---	---

### ADDITIVES

Calcium	ppm	█ 1714	---	---	---
Magnesium	ppm	█ 302	---	---	---
Zinc	ppm	█ 1154	---	---	---
Phosphorus	ppm	█ 997	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 74	---	---	---

**Depot:** VP1080862  
**Unique No:** 10714080  
**Signed:** Don Baldrige  
**Report Date:** 30 Oct 2023

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

