

# OIL ANALYSIS REPORT



**DAVID JOHNSTONE 13098 NO UNIT VPA050560 - PORT DIESEL ENGINE**

**Sample No:** VPA050560

**Oil Type:** SHELL ROTELLA T 15W40

## SAMPLE INFORMATION

Sample Number	VPA050560	---	---	---
Sample Date	25 Jun 2024	---	---	---
Machine Hours	0	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

## OIL CONDITION

Visc @ 40°C	cSt	▲ 94.1	---	---	---
Visc @ 100°C	cSt	▲ 11.4	---	---	---
Viscosity Index (VI)	Scale	▲ 108	---	---	---
Oxidation (PA)	%	30	---	---	---

## CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.4	---	---	---
Nitration (PA)	%	38	---	---	---
Sulfation (PA)	%	41	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.7	---	---	---
Silicon	ppm	■ 21	---	---	---
Sodium	ppm	■ 4	---	---	---
Potassium	ppm	■ 2	---	---	---

## WEAR METALS

Iron	ppm	■ 76	---	---	---
Copper	ppm	■ 11	---	---	---
Lead	ppm	■ 7	---	---	---
Tin	ppm	▲ 38	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ 5	---	---	---
Molybdenum	ppm	■ 26	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	■ <1	---	---	---
Silver	ppm	■ <1	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	■ 2264	---	---	---
Magnesium	ppm	75	---	---	---
Zinc	ppm	■ 935	---	---	---
Phosphorus	ppm	■ 835	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	3	---	---	---

**Bridgeview Marine Services**  
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## Diagnosis

We recommend that you change the oil at the next available stoppage or outage. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was specified as SHELL ROTELLA T 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. Tin ppm levels are abnormal. Piston wear is indicated. We have assumed that this component is not breaking in (age of component not reported). Fuel content negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**Depot:** VP627399  
**Unique No:** 5801621  
**Signed:** Kevin Marson  
**Report Date:** 27 Jun 2024

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## GRAPHS

