

# [MARK LINTON [501400]] ONAN J180432133 - GENSET

**Sample No:** VPA043231

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

## SAMPLE INFORMATION

Sample Number	VPA043231	---	---	---
Sample Date	23 Sep 2022	---	---	---
Machine Hours	478	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

**Endor Marine LLC - Coastal Marine - 152124**  
 4300 11th Ave. NW  
 SEATTLE, WA  
 US 98107  
 Contact: WILLOW YANARELLA  
 service@coastalmarineengine.com  
 T: (206)784-3703  
 F: (206)784-8823

## OIL CONDITION

Visc @ 100°C	cSt	▲ 12.3	---	---	---
Base Number (BN)	mg KOH/g	■ 9.5	---	---	---
Oxidation (PA)	%	78	---	---	---

## Diagnosis

We advise that you check the fuel injection system. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

## CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	87	---	---	---
Sulfation (PA)	%	61	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	▲ 2.9	---	---	---
Silicon	ppm	■ 18	---	---	---
Sodium	ppm	■ 4	---	---	---
Potassium	ppm	■ 2	---	---	---

## WEAR METALS

Iron	ppm	■ 27	---	---	---
Copper	ppm	■ 25	---	---	---
Lead	ppm	■ 1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 5	---	---	---
Chromium	ppm	■ 2	---	---	---
Molybdenum	ppm	■ 57	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	■ 4	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	■ 1990	---	---	---
Magnesium	ppm	■ 539	---	---	---
Zinc	ppm	■ 1247	---	---	---
Phosphorus	ppm	■ 1002	---	---	---
Barium	ppm	■ 8	---	---	---
Boron	ppm	■ 44	---	---	---

**Depot:** VP794951  
**Unique No:** 10151591  
**Signed:** Don Baldrige  
**Report Date:** 29 Sep 2022

Contact/Location: WILLOW YANARELLA - VP794951

# GRAPHS

