

OIL ANALYSIS REPORT



NADINE URUIOLI SUZANNA KAVOOR VOLVO PENTA 5 102968944 - CENTER DIESEL ENGINE

Sample No: VPA021865
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA021865	---	---	---
Sample Date	27 Nov 2023	---	---	---
Machine Hours	529	---	---	---
Oil Hours	529	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

Helmut's Marine Service
 619 Canal Street
 SAN RAFAEL, CA
 US 94901-3545
 Contact: NADINE URUIOLI
 SERVICE@HELMUTSMARINE.COM
 T: x:
 F: x:

OIL CONDITION

Visc @ 100°C	cSt	█ 12.8	---	---	---
Base Number (BN)	mg KOH/g	█ 8.0	---	---	---
Oxidation (PA)	%	57	---	---	---

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

Water	%	NEG	---	---	---
Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	62	---	---	---
Sulfation (PA)	%	50	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 8	---	---	---
Sodium	ppm	█ 4	---	---	---
Potassium	ppm	█ 4	---	---	---

WEAR METALS

Iron	ppm	█ 17	---	---	---
Copper	ppm	█ 4	---	---	---
Lead	ppm	█ < 1	---	---	---
Tin	ppm	█ < 1	---	---	---
Aluminum	ppm	█ 3	---	---	---
Chromium	ppm	█ < 1	---	---	---
Molybdenum	ppm	█ 16	---	---	---
Nickel	ppm	█ < 1	---	---	---
Titanium	ppm	█ < 1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ < 1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1800	---	---	---
Magnesium	ppm	█ 986	---	---	---
Zinc	ppm	█ 1167	---	---	---
Phosphorus	ppm	█ 1015	---	---	---
Barium	ppm	█ 1	---	---	---
Boron	ppm	█ 105	---	---	---

Depot: VP152741
Unique No: 10764039
Signed: Doug Bogart
Report Date: 29 Nov 2023

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VOLVO PENTA

GRAPHS

