

OIL ANALYSIS REPORT

VOLVO PENTA

NADINE URCIUOLI BERT OTTERSON VOLVO PENTA A907499 - STARBOARD DIESEL ENGINE

Sample No: VPA052308

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

SAMPLE INFORMATION

Sample Number	VPA052308	---	---	---
Sample Date	13 Feb 2024	---	---	---
Machine Hours	228	---	---	---
Oil Hours	228	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

Helmut's Marine Service

619 Canal Street
SAN RAFAEL, CA
US 94901-3545
Contact: NADINE URCIUOLI
SERVICE@HELMUTSMARINE.COM

T: x:

F: x:

OIL CONDITION

Visc @ 100°C	cSt	█ 13.6	---	---	---
Base Number (BN)	mg KOH/g	█ 10.2	---	---	---
Oxidation (PA)	%	58	---	---	---

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)	%	43	---	---	---
Sulfation (PA)	%	52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	█ < 1	---	---	---
Potassium	ppm	█ 0	---	---	---

WEAR METALS

Iron	ppm	█ 13	---	---	---
Copper	ppm	█ < 1	---	---	---
Lead	ppm	█ < 1	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ < 1	---	---	---
Chromium	ppm	█ 0	---	---	---
Molybdenum	ppm	█ 55	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 0	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1073	---	---	---
Magnesium	ppm	█ 870	---	---	---
Zinc	ppm	█ 1145	---	---	---
Phosphorus	ppm	█ 990	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 12	---	---	---

Depot: VP152741

Unique No: 10886743

Signed: Don Baldrige

Report Date: 21 Feb 2024

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GRAPHS

