

OIL ANALYSIS REPORT

VOLVO PENTA

JOE NIEMER 501985 VOLVO PENTA A401237 - STARBOARD DIESEL ENGINE

Sample No: VPA056281

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

SAMPLE INFORMATION

Sample Number	VPA056281	---	---	---
Sample Date	27 Jun 2023	---	---	---
Machine Hours	450	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.9	---	---	---
Base Number (BN)	mg KOH/g	█ 9.0	---	---	---
Oxidation (PA)	%	61	---	---	---

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 suitable for further service.

CONTAMINATION

Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	58	---	---	---
Sulfation (PA)	%	55	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	< 1.0	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ 1	---	---	---

WEAR METALS

Iron	ppm	█ 9	---	---	---
Copper	ppm	█ 2	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ < 1	---	---	---
Aluminum	ppm	█ 1	---	---	---
Chromium	ppm	█ < 1	---	---	---
Molybdenum	ppm	█ 42	---	---	---
Nickel	ppm	█ < 1	---	---	---
Titanium	ppm	█ < 1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ < 1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1314	---	---	---
Magnesium	ppm	█ 779	---	---	---
Zinc	ppm	█ 904	---	---	---
Phosphorus	ppm	█ 756	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 170	---	---	---

Depot: VP794951
Unique No: 10549102
Signed: Don Baldrige
Report Date: 11 Jul 2023

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GRAPHS

