

# OIL ANALYSIS REPORT

# VOLVO PENTA

## BARDIN VOLVO PENTA A1135520 - CENTER DIESEL ENGINE

Sample No: VPA054165

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

### SAMPLE INFORMATION

Sample Number	VPA054165	VPA041197	---	---
Sample Date	08 May 2024	05 Dec 2022	---	---
Machine Hours	0	327	---	---
Oil Hours	0	327	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

### OIL CONDITION

Visc @ 100°C	cSt	█ 13.0	█ 13.5	---	---
Base Number (BN)	mg KOH/g	█ 8.4	█ 11.4	---	---
Oxidation (PA)	%	86	63	---	---

### CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.7	█ 0.6	---	---
Nitration (PA)	%	66	63	---	---
Sulfation (PA)	%	62	60	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 22	█ 10	---	---
Sodium	ppm	█ 3	█ 2	---	---
Potassium	ppm	█ 3	█ 0	---	---

### WEAR METALS

Iron	ppm	█ 30	█ 28	---	---
Copper	ppm	█ 10	█ 12	---	---
Lead	ppm	█ 3	█ 7	---	---
Tin	ppm	█ 2	█ 2	---	---
Aluminum	ppm	█ 4	█ 3	---	---
Chromium	ppm	█ 2	█ 4	---	---
Molybdenum	ppm	█ 63	█ 61	---	---
Nickel	ppm	█ 2	█ 7	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ 1	█ <1	---	---
Vanadium	ppm	0	0	---	---

### ADDITIVES

Calcium	ppm	█ 1108	█ 1148	---	---
Magnesium	ppm	█ 1012	█ 989	---	---
Zinc	ppm	█ 1336	█ 1317	---	---
Phosphorus	ppm	█ 898	█ 1018	---	---
Barium	ppm	█ 1	█ 0	---	---
Boron	ppm	█ 2	█ 2	---	---

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### 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.

Depot: VP1298996  
Unique No: 11061880  
Signed: Doug Bogart  
Report Date: 06 Jun 2024

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**VOLVO  
PENTA**

## GRAPHS

