

OIL ANALYSIS REPORT

VOLVO PENTA

NADINE URUIOLI DICK ROBINSON VOLVO PENTA A1089615 - CENTER DIESEL ENGINE

Sample No: VPA053289

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

SAMPLE INFORMATION

Sample Number	VPA053289	---	---	---
Sample Date	20 May 2024	---	---	---
Machine Hours	148	---	---	---
Oil Hours	148	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 13.5	---	---	---
Base Number (BN)	mg KOH/g	█ 9.2	---	---	---
Oxidation (PA)	%	60	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.6	---	---	---
Nitration (PA)	%	62	---	---	---
Sulfation (PA)	%	56	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 45	---	---	---
Sodium	ppm	█ 8	---	---	---
Potassium	ppm	█ 25	---	---	---

WEAR METALS

Iron	ppm	▲ 358	---	---	---
Copper	ppm	█ 48	---	---	---
Lead	ppm	█ 8	---	---	---
Tin	ppm	█ 4	---	---	---
Aluminum	ppm	▲ 78	---	---	---
Chromium	ppm	▲ 27	---	---	---
Molybdenum	ppm	█ 85	---	---	---
Nickel	ppm	▲ 7	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ <1	---	---	---
Manganese	ppm	█ 4	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	█ 1432	---	---	---
Magnesium	ppm	█ 1326	---	---	---
Zinc	ppm	█ 1718	---	---	---
Phosphorus	ppm	█ 1542	---	---	---
Barium	ppm	█ 2	---	---	---
Boron	ppm	█ 6	---	---	---

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T: x:
F: x:

Diagnosis

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Cylinder, crank, or cam shaft wear is indicated. Piston and ring wear is indicated. Component wear metal level(s) high for break in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: VP152741
Unique No: 11057062
Signed: Sean Felton
Report Date: 31 May 2024

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GRAPHS

