

OIL ANALYSIS REPORT

VOLVO PENTA

KELLY VOLVO PENTA 2006015810 - PORT DIESEL ENGINE

Sample No: VPA058994
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA058994	VPA035651	---	---
Sample Date	08 Dec 2023	05 Nov 2021	---	---
Machine Hours	1400	1200	---	---
Oil Hours	0	75	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	MARGINAL	NORMAL	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 13.6	█ 13.8	---	---
Base Number (BN)	mg KOH/g	█ 9.7	---	---	---
Oxidation (PA)	%	61	59	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.2	█ 0.1	---	---
Nitration (PA)	%	53	48	---	---
Sulfation (PA)	%	54	53	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 5	█ 3	---	---
Sodium	ppm	█ 2	█ 2	---	---
Potassium	ppm	█ 2	█ 0	---	---

WEAR METALS

Iron	ppm	█ 21	█ 16	---	---
Copper	ppm	█ 4	█ 3	---	---
Lead	ppm	█ 2	█ <1	---	---
Tin	ppm	█ <1	█ <1	---	---
Aluminum	ppm	▲ 32	█ 20	---	---
Chromium	ppm	█ 2	█ 1	---	---
Molybdenum	ppm	█ 60	█ 56	---	---
Nickel	ppm	█ 1	█ <1	---	---
Titanium	ppm	█ <1	█ 0	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ <1	█ <1	---	---
Vanadium	ppm	<1	0	---	---

ADDITIVES

Calcium	ppm	█ 1021	█ 1050	---	---
Magnesium	ppm	█ 949	█ 906	---	---
Zinc	ppm	█ 1215	█ 1094	---	---
Phosphorus	ppm	█ 1009	█ 1010	---	---
Barium	ppm	█ 11	█ 0	---	---
Boron	ppm	█ <1	█ 5	---	---

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Diagnosis

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is marginal. All other 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: 10782374
Signed: Doug Bogart
Report Date: 14 Dec 2023

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GRAPHS

