

OIL ANALYSIS REPORT



RICHARD FABIAN DANIEL/502769 VOLVO PENTA A807457 - PORT DIESEL ENGINE

Sample No: VPA059263

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

SAMPLE INFORMATION

Sample Number	VPA059263	VPA043493	---	---
Sample Date	26 Mar 2024	27 Sep 2022	---	---
Machine Hours	362	287	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	ABNORMAL	ATTENTION	---	---

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OIL CONDITION

Visc @ 100°C	cSt	13.5	13.7	---	---
Base Number (BN)	mg KOH/g	9.6	10.8	---	---
Oxidation (PA)	%	61	65	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.5	0.6	---	---
Nitration (PA)	%	67	70	---	---
Sulfation (PA)	%	55	59	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	15	11	---	---
Sodium	ppm	<1	1	---	---
Potassium	ppm	7	7	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. 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.

WEAR METALS

Iron	ppm	▲ 187	124	---	---
Copper	ppm	25	20	---	---
Lead	ppm	<1	2	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	16	13	---	---
Chromium	ppm	6	8	---	---
Molybdenum	ppm	55	56	---	---
Nickel	ppm	4	1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	1	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1203	1065	---	---
Magnesium	ppm	1081	941	---	---
Zinc	ppm	1316	1202	---	---
Phosphorus	ppm	1100	1024	---	---
Barium	ppm	0	0	---	---
Boron	ppm	7	2	---	---

Depot: VP794951
Unique No: 10953994
Signed: Sean Felton
Report Date: 03 Apr 2024

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**VOLVO
PENTA**

GRAPHS

