

OIL ANALYSIS REPORT



RICHARD FABIAN BRETT/502769 VOLVO PENTA A8 12374 - STARBOARD DIESEL ENGINE

Sample No: VPA053117

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

SAMPLE INFORMATION

Sample Number	VPA053117	VPA043492	---	---
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	13.8	13.5	---	---
Base Number (BN)	mg KOH/g	9.6	10.9	---	---
Oxidation (PA)	%	64	63	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.5	0.6	---	---
Nitration (PA)	%	73	66	---	---
Sulfation (PA)	%	56	59	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	15	11	---	---
Sodium	ppm	<1	1	---	---
Potassium	ppm	8	4	---	---

WEAR METALS

Iron	ppm	▲ 238	85	---	---
Copper	ppm	20	16	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	1	<1	---	---
Aluminum	ppm	14	8	---	---
Chromium	ppm	11	4	---	---
Molybdenum	ppm	57	59	---	---
Nickel	ppm	5	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	1	<1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1249	1047	---	---
Magnesium	ppm	1081	945	---	---
Zinc	ppm	1318	1238	---	---
Phosphorus	ppm	1108	1062	---	---
Barium	ppm	0	0	---	---
Boron	ppm	11	0	---	---

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.

Depot: VP794951
Unique No: 10953995
Signed: Sean Felton
Report Date: 03 Apr 2024

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GRAPHS

