

OIL ANALYSIS REPORT



MANCHESTER 40 DRIVE R823699M VOLVO PENTA 7011481578 - VARIABLE SPEED - DIESEL ENGINE

Sample No: VPA027593
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA027593	VPA056671	VPA048401	---
Sample Date	10 May 2024	15 Sep 2023	06 Oct 2022	---
Machine Hours	313	210	110	---
Oil Hours	71	0	110	---
Oil Changed	N/A	N/A	N/A	---
Sample Status	ATTENTION	ATTENTION	ATTENTION	---

Power Products Systems LLC
 432 Warren Avenue, 432 Warren Ave.
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 F:

OIL CONDITION

Visc @ 100°C	cSt	12.1	12.1	12.1	---
Base Number (BN)	mg KOH/g	9.1	10.7	11.6	---
Oxidation (PA)	%	73	73	63	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	42	44	49	---
Sulfation (PA)	%	57	57	55	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	1.3	---
Silicon	ppm	11	18	31	---
Sodium	ppm	3	2	0	---
Potassium	ppm	0	<1	2	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

WEAR METALS

Iron	ppm	5	4	9	---
Copper	ppm	3	3	20	---
Lead	ppm	0	0	<1	---
Tin	ppm	<1	<1	2	---
Aluminum	ppm	1	<1	1	---
Chromium	ppm	0	0	<1	---
Molybdenum	ppm	43	43	46	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	1	<1	2	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	1634	1726	1454	---
Magnesium	ppm	510	541	733	---
Zinc	ppm	887	969	1254	---
Phosphorus	ppm	765	792	1031	---
Barium	ppm	0	0	0	---
Boron	ppm	78	71	8	---

Depot: VP153549
Unique No: 11042522
Signed: Jonathan Hester
Report Date: 23 May 2024

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**VOLVO
PENTA**

GRAPHS

