

OIL ANALYSIS REPORT



MANCHESTER AIRPORT B3 DRIVE R823699M VOLVO PENTA 2013914605 - VARIABLE SPEED - CENTER DIESEL ENGINE

Sample No: VPA060857
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA060857	VPA056818	VPA046681	VPA028715
Sample Date	10 May 2024	15 Sep 2023	06 Oct 2022	07 Mar 2022
Machine Hours	814	648	401	385
Oil Hours	130	0	401	0
Oil Changed	Changed	N/A	N/A	N/A
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

Power Products Systems LLC
 432 Warren Avenue, 432 Warren Ave.
 PORTLAND, ME
 US 04103
 Contact: Cody Clemens
 cclemens@powerprodsys.com
 T:
 F:

OIL CONDITION

Visc @ 100°C	cSt	12.0	12.0	12.0	12.0
Base Number (BN)	mg KOH/g	10.1	9.1	11.0	10.7
Oxidation (PA)	%	75	73	62	63

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	45	45	58	54
Sulfation (PA)	%	58	57	55	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.1
Silicon	ppm	11	17	18	17
Sodium	ppm	3	2	0	1
Potassium	ppm	0	1	2	3

Diagnosis

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. 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	3	4	10	10
Copper	ppm	2	1	13	13
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	2	1
Aluminum	ppm	<1	<1	2	2
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	44	42	54	49
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	2	2
Silver	ppm	0	0	0	0
Manganese	ppm	1	0	1	1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1630	1718	1326	1276
Magnesium	ppm	519	543	841	840
Zinc	ppm	874	954	1264	1133
Phosphorus	ppm	768	773	1032	992
Barium	ppm	0	0	0	0
Boron	ppm	78	69	15	15

Depot: VP153549
Unique No: 11042520
Signed: Jonathan Hester
Report Date: 23 May 2024

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VOLVO PENTA

GRAPHS

