WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

GREG NOVOTNY & KRISTA PEARSON [7719970]

VOLVO PENTA A952845

Center Diesel Engine

VOLVO VDS-4.5 Premium Motor Oil 15W40 (3 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		VPA061737		
	Sample Date		Client Info		10 May 2024		
	Machine Age	hrs	Client Info		301		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>80	12		
	Chromium	ppm	ASTM D5185m	>6	<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	>2	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		1		
	Lead	ppm	ASTM D5185m		- <1		
	Copper	ppm	ASTM D5185m		3		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1		
	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	5.1		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.8		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		1		
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.	Boron	ppm	ASTM D5185m		11		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		59		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		1053		
	Calcium	ppm	ASTM D5185m		1191		
	Phosphorus		ASTM D5185m		1140		
	Zinc	ppm	ASTM D5185m		1373		
		ppm					
	Sulfur	ppm Abo/ 1mm	ASTM D5185m	- OF	4319		
	Oxidation Base Number (BN)	Abs/.1mm	*ASTM D7414 ASTM D2896	>25	13.1 9.8		
			43 HV/1 HZXVIA		u x		





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06177668 Unique Number : 11023721

: VPA061737

Received **Tested**

Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 13 May 2024

: 13 May 2024

: 13 May 2024 - Doug Bogart

7215 S 228th St Kent, WA US 98032 Contact: PAT RYAN

Pacific Power Group - VP981534

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To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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