WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

THOMAS GILLINGHAM [SAM]

VOLVO PENTA 7008539225

Component Port Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
1233MM2NDATION	Sample Number		Client Info		VPA059071		
Resample at the next service interval to monitor.	Sample Date		Client Info		10 Jan 2024		
	Machine Age	hrs	Client Info		352		
	Oil Age	hrs	Client Info		192		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185m	>80	33		
	Chromium	ppm	ASTM D5185m		2		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		2		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		5		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		90		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Ciliana		ACTA DE10E	05	40		
CONTAMINATION	Silicon	ppm	ASTM D5185m		16		
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185m		3		
			WC Method		<1.0		
	Water		WC Method	>0.1	NEG NEG		
	Glycol Soot %	%	*ASTM D7844		2		
	Nitration	Abs/cm	*ASTM D7624	- 20	10.1		
	Sulfation	Abs/.1mm	*ASTM D7624	>20	26.4		
	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		*Visual	>0.1	NEG		
·····	Lindisined Water		Visuai	20.1			
LUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		195		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		113		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m		744		
	Calcium	ppm	ASTM D5185m		1617		
	Phosphorus	ppm	ASTM D5185m		795		
	Zinc	ppm	ASTM D5185m		951		
	Sulfur	ppm	ASTM D5185m		2575		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0		
	Base Number (BN)	mg KOH/g	ASTM D2896		8.6		
	Visc @ 100°C	cSt	ASTM D445		15.1		





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: VPA059071 : 06064963 : 10836345

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved Diagnosed

: 22 Jan 2024 Diagnostician : Angela Borella

: 18 Jan 2024

Test Package : MOB 1 (Additional Tests: TBN) 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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