**WEAR CONTAMINATION FLUID CONDITION** 

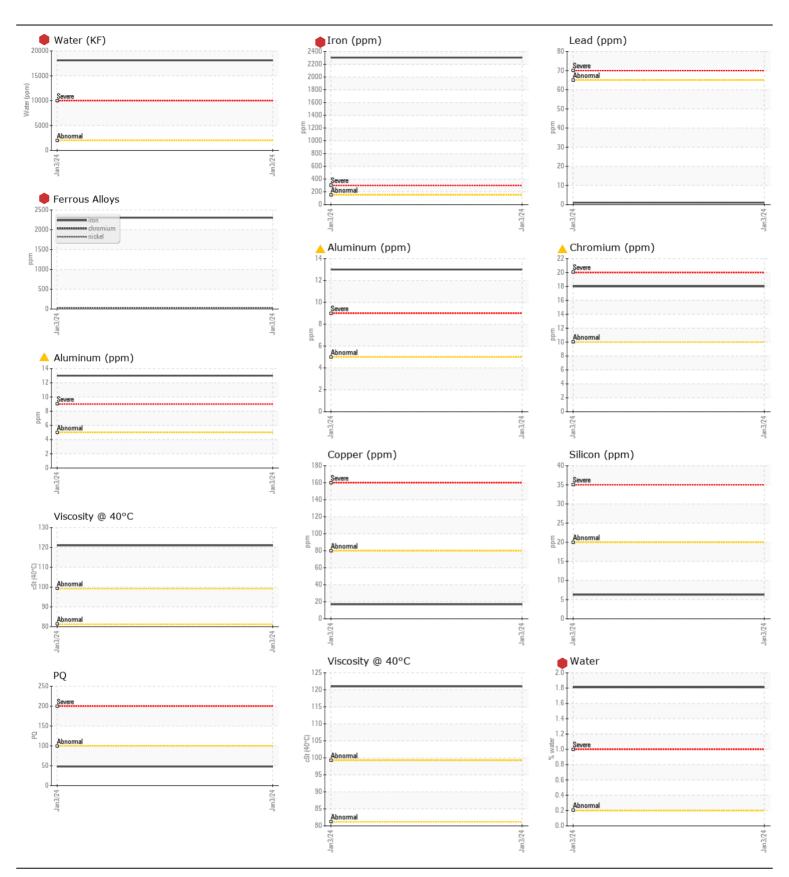
**SEVERE SEVERE NORMAL** 

## **KEN BEST [AK 502568]**

## **VOLVO PENTA 4112067470 - STERNDRIVE**

Component Gearbox

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.	Sample Number		Client Info		VPA059369		
	Sample Date		Client Info		03 Jan 2024		
	Machine Age	hrs	Client Info		221		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	PQ		ASTM D8184		48		
	Iron	ppm	ASTM D5185m	>150	<b>2304</b>		
Gear wear is indicated.	Chromium	ppm	ASTM D5185m		<u> </u>		
	Nickel	ppm	ASTM D5185m		9		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>5	<b>1</b> 3		
	Lead	ppm	ASTM D5185m	>65	1		
	Copper	ppm	ASTM D5185m	>80	17		
	Tin	ppm	ASTM D5185m	>8	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	6		
There is a high concentration of water present in the oil.	Potassium	ppm	ASTM D5185m		2		
	Water	%	ASTM D6304	>0.2	1.81		
	ppm Water	ppm	ASTM D6304	>2000	<b>18100</b>		
	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	>0.2	• 0.2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		119		
	Barium	ppm	ASTM D5185m		7		
	Molybdenum	ppm	ASTM D5185m		15		
	Manganese	ppm	ASTM D5185m		15		
	Magnesium	ppm	ASTM D5185m		3		
	Calcium	ppm	ASTM D5185m		12		
	Phosphorus	ppm	ASTM D5185m		1027		
	Zinc	ppm	ASTM D5185m		47		
	Sulfur	ppm	ASTM D5185m		27766		





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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06054321

: VPA059369 : 10820270

Recieved : 08 Jan 2024 Diagnosed Diagnostician

: 10 Jan 2024 : Jonathan Hester

Test Package : MOB 1 (Additional Tests: KF, PQ) Certificate L2367 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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