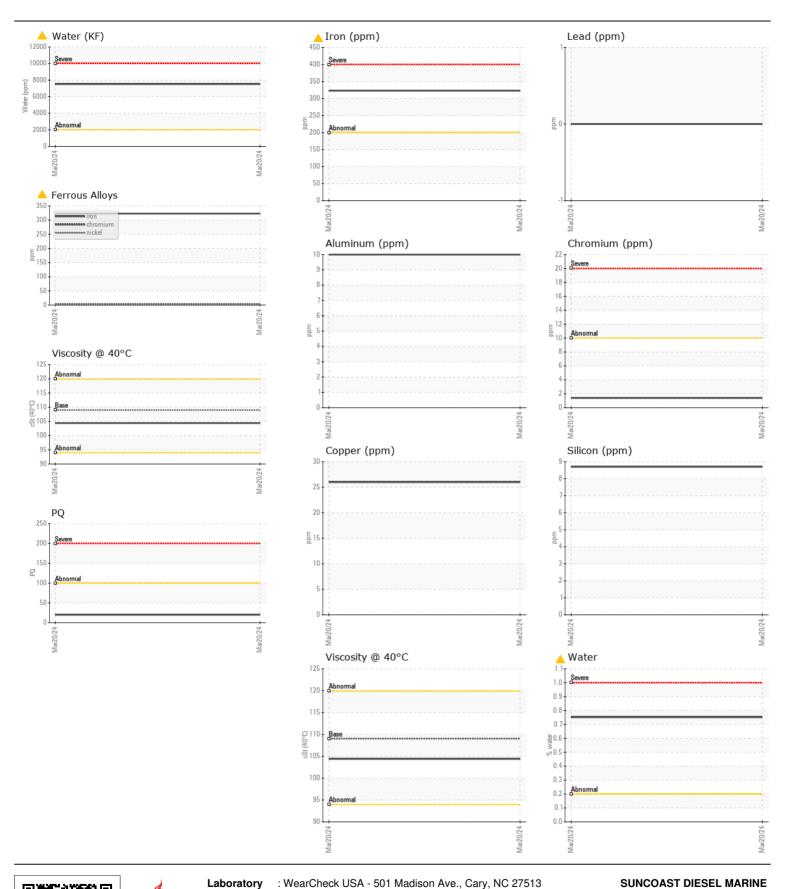
**WEAR CONTAMINATION FLUID CONDITION** 

**ABNORMAL ABNORMAL NORMAL** 

## **VOLVO PENTA 394002135**

Component Starboard IPS

GEAR OIL SAE 75W90 ( GAL)							
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. Resample at the next service interval to monitor.	Sample Number		Client Info		VPA050982		
	Sample Date		Client Info		20 Mar 2024		
	Machine Age	hrs	Client Info		177		
	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				ABNORMAL		
WEAR	PQ		ASTM D8184		20		
Gear wear is indicated.	Iron	ppm	ASTM D5185m	>200	<b>△</b> 323		
	Chromium	ppm	ASTM D5185m	>10	1		
	Nickel	ppm	ASTM D5185m	>10	3		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		10		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		26		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		9		
There is a high concentration of water present in the oil.	Potassium	ppm	ASTM D5185m	>20	1		
	Water	%	ASTM D6304	>0.2	<b>△</b> 0.752		
	ppm Water	ppm	ASTM D6304	>2000	<b>△</b> 7520		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	HAZY		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	0.2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		75		
	Boron	ppm	ASTM D5185m	400	332		
The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		5		
	Magnesium	ppm	ASTM D5185m	12	11		
	Calcium	ppm	ASTM D5185m		6		
	Phosphorus	ppm	ASTM D5185m	1650	1407		
	Zinc	ppm	ASTM D5185m	125	37		
	Sulfur	ppm	ASTM D5185m	22500	26833		
	Visc @ 40°C	cSt	ASTM D445	109	104.4		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VPA050982 Lab Number : 06125340

Unique Number : 10939491

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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

Received **Tested** Diagnosed

: 21 Mar 2024 : 21 Mar 2024

: 21 Mar 2024 - Doug Bogart

Contact: SERVICE MANAGER info@suncoastdmi.com

6341 PORTER ROAD, SUITE 6

T: (941)342-0033

SARASOTA, FL

US 34240

\* - 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)