

**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

[319428]

VOLVO 3950005488

Component Starboard IPS

VOLVO API GL-5 SAE 75W90 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill.	Sample Number		Client Info		VPA056632		
Resample at the next service interval to monitor.	Sample Date		Client Info		01 Mar 2024		
	Machine Age	hrs	Client Info		0		
	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				NORMAL		
WEAR	PQ		ASTM D8184*		0		
All component wear rates are normal.	Iron	ppm	ASTM D5185(m)	>200	20		
	Chromium	ppm	ASTM D5185(m)	>10	0		
	Nickel	ppm	ASTM D5185(m)	>10	<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		<1		
	Lead	ppm	ASTM D5185(m)		<1		
	Copper	ppm	ASTM D5185(m)		2		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		1		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	4		
	Water		WC Method		NEG		
	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	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1		
	Boron	ppm	ASTM D5185(m)		205		
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		0		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		3		
	Calcium	ppm	ASTM D5185(m)		44		
	Phosphorus	ppm	ASTM D5185(m)		1194		
	Zinc	ppm	ASTM D5185(m)		12		
	Sulfur	ppm	ASTM D5185(m)		21079		
	\ <i>I</i> ''	01	AOTA D7070( )		400		

Visc @ 40°C

cSt

ASTM D7279(m)

106





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Lab Number : 02620625

: VPA056632 Unique Number : 5737735

Received **Tested** 

: 07 Mar 2024 : 07 Mar 2024 Diagnosed Test Package: MOB 1 (Additional Tests: PQ)

: 08 Mar 2024 - Kevin Marson

79 CHAMPLAIN ROAD, P.O. BOX 5025 Penetanguishene, ON CA L9M 2G2 Contact: Ian Kerr

> service@hindsonmarina.com T: (705)549-2004 F: (705)549-3138

HINDSON MARINE SERVICE INC

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.