WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

CARSTENSEN [JB] **VOLVO PENTA 3194011703**

Component Starboard IPS

GEAR OIL SAE 75W90 (4 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA051633		
	Sample Date		Client Info		13 Mar 2024		
	Machine Age	hrs	Client Info		898		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	PQ		ASTM D8184		22		
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>200	57		
	Chromium	ppm	ASTM D5185m	>10	<1		
	Nickel	ppm	ASTM D5185m	>10	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		4		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m		14		
	Potassium	ppm	ASTM D5185m	>20	4		
	Water		WC Method	>0.2	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 D5185m		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	400	310		
	Barium	ppm	ASTM D5185m	200	0		
	Molybdenum	ppm	ASTM D5185m	12	<1		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m	12	16		
	Calcium	ppm	ASTM D5185m	150	76		
	Phosphorus	ppm	ASTM D5185m	1650	1317		
	Zinc	ppm	ASTM D5185m		21		
	Sulfur	ppm	ASTM D5185m		25514		
	Visc @ 40°C	cSt	ASTM D445	109	105		





Laboratory Sample No.

Lab Number : 06122721

: VPA051633 Unique Number: 10936872

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

Diagnosed

: 20 Mar 2024 : 21 Mar 2024 - Jonathan Hester

: 19 Mar 2024

Point Judith Marina 360 Gooseberry Road WAKEFIELD, RI US 02879

Test Package : MOB 1 (Additional Tests: PQ) Contact: MATT ST. ANGELO To discuss this sample report, contact Customer Service at 1-800-237-1369. service@pjmarina.com;canastasio@wearcheckusa.com

* - 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) T: (401)789-7189 F: (401)783-5350