WEAR CONTAMINATION FLUID CONDITION

ABNORMAL ABNORMAL NORMAL

Area

[ENGLAND]

**VOLVO PENTA 3194005177** 

Starboard IPS

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. Resample at the next service interval to monitor.	Sample Number		Client Info		VPA045509		
	Sample Date		Client Info		24 Jun 2024		
	Machine Age	hrs	Client Info		337		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
WEAR	PQ		ASTM D8184		21		
The aluminum level is abnormal. All other component wear rates are normal.	Iron	ppm	ASTM D5185m	>275	224		
	Chromium	ppm	ASTM D5185m	>4	1		
	Nickel	ppm	ASTM D5185m	>4	1		
	Titanium	ppm	ASTM D5185m	>3	<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m	>10	<b>1</b> 5		
	Lead	ppm	ASTM D5185m	>4	1		
	Copper	ppm	ASTM D5185m	>30	28		
	Tin	ppm	ASTM D5185m	>3	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>35	10		
Appearance is hazy. There is a moderate concentration of water present in the oil.	Potassium	ppm	ASTM D5185m	>20	6		
	Water	%	ASTM D6304	>0.2	<b>△</b> 0.620		
	ppm Water	ppm	ASTM D6304	>2000	<b>△</b> 6200		
	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		129		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	400	120		
	Barium	ppm	ASTM D5185m	200	<1		
	Molybdenum	ppm	ASTM D5185m	12	2		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m	12	34		
	Calcium	ppm	ASTM D5185m	150	68		
	Phosphorus	ppm	ASTM D5185m	1650	1396		
	Zinc	ppm	ASTM D5185m		81		
	Sulfur	ppm	ASTM D5185m	00500	27444		

Visc @ 40°C

cSt

ASTM D445 109

108





Certificate L2367

Laboratory Sample No.

: VPA045509 Lab Number : 06222893 Unique Number : 11101090

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

: 01 Jul 2024 Diagnosed

: 01 Jul 2024 - Jonathan Hester Test Package: MOB 1 (Additional Tests: KF, PQ)

: 27 Jun 2024

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.

**SUNCOAST DIESEL MARINE** 6341 PORTER ROAD, SUITE 6 SARASOTA, FL

US 34240 Contact: SERVICE MANAGER

info@suncoastdmi.com T: (941)342-0033

F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)