WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

PHANTOM OF ART

VOLVO PENTA 7008518782

Starboard Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (7 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
TECOMMENDATION	Sample Number	OOW	Client Info	LITTION	VPA062939		
Resample at the next service interval to monitor.	Sample Date		Client Info		25 Jun 2024		
	Machine Age	hrs	Client Info		237		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed	1115	Client Info		Not Changd		
	Filter Changed		Client Info		Not Change		
	Sample Status		Client inio		NORMAL		
					NORWAL		
WEAR	Iron	ppm	ASTM D5185m	>80	45		
VEAT (Chromium	ppm	ASTM D5185m		2		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m		2		
	Titanium	ppm	ASTM D5185m		0		
	Silver		ASTM D5185m		2		
	Aluminum	ppm	ASTM D5185m		5		
		ppm					
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		70		
	Tin	ppm	ASTM D5185m	>9	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	26		
	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method	>4.0	<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	,	NEG		
	Soot %	%	*ASTM D7844		1.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.7		
	Sulfation	Abs/.1mm	*ASTM D7024		20.8		
	Silt				NONE		
		scalar	*Visual	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	>0.1	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m	\158	3		
LOID GONDITION	Boron	ppm	ASTM D5185m		335		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0		
		ppm	ASTM D5185m		51		
	Molybdenum	ppm		100			
	Manganese	ppm	ASTM D5185m	150	1		
	Magnesium	ppm	ASTM D5185m		157		
	Calcium	ppm	ASTM D5185m		3392		
	Phosphorus	ppm	ASTM D5185m		967		
	Zinc	ppm	ASTM D5185m		1270		
	Sulfur	ppm	ASTM D5185m		3342		
	Oxidation	Abs/.1mm	*ASTM D7414		12.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.7		
	, ,						





Laboratory Sample No. Unique Number : 11099174

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VPA062939 Lab Number : 06220977

Received **Tested** Diagnosed

: 26 Jun 2024 : 27 Jun 2024

: 27 Jun 2024 - Don Baldridge

US 33314 Contact: ASHANTI BURKE aburke@midiflorida.com

Marine International Diesels Inc.

3600 HACIENDA BLVD UNIT G

T: (954)761-1086 F: (954)761-1186

Test Package : MOB 1 (Additional Tests: TBN) 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) DAVIE, FL