WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

JASON MIDDLETON [19634]

A226754

Starboard Main Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.	Sample Number		Client Info		VPA062125		
	Sample Date		Client Info		09 Jun 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		
VEAD.							
VEAR	Iron	ppm	ASTM D5185(m)		11		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		1		
	Aluminum	ppm	ASTM D5185(m)		1		
	Lead	ppm	ASTM D5185(m)		<1		
	Copper	ppm	ASTM D5185(m)		4		
	Tin	ppm	ASTM D5185(m)	>14	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	4		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*		0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	5.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
LUID CONDITION	Codium	nnm	ACTM DE10E(m)	. 75	•		
	Sodium	ppm	ASTM D5185(m)	>/3	2		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m) ASTM D5185(m)		0		
		ppm					
	Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m)		61 0		
	Magnesium	ppm	ASTM D5185(III) ASTM D5185(m)		996		
	Calcium	ppm	ASTM D5185(III) ASTM D5185(m)		1071		
	Phosphorus	ppm	ASTM D5185(III) ASTM D5185(m)		1071		
	Zinc	ppm	ASTM D5185(III) ASTM D5185(m)		1194		
		ppm	(/				
	Sulfur	ppm	ASTM D5185(m)		2654		

Visc @ 100°C cSt

ASTM D7279(m)

12.9





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: VPA062125 Lab Number : 02640740 Unique Number : 5789902 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 10 Jun 2024 **Tested** : 12 Jun 2024

Diagnosed

: 12 Jun 2024 - Kevin Marson

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.

Sea Power Ltd 2077 Amelia Ave SIDNEY, BC CA V8L 3Z8 Contact: Kayla Sousa service@seapower.ca T: (250)656-4341