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

Machine Id

535110626

Starboard Main Engine

DIESEL ENGINE OIL SAE 15W40 (90 LTR)					.,		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.	Sample Number		Client Info		VPA053429		
	Sample Date		Client Info		13 May 2024		
	Machine Age	hrs	Client Info		17000		
	Oil Age	hrs	Client Info		500		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>75	3		
	Chromium	ppm	ASTM D5185(m)		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	, ,	>3	0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>15	<1		
	Lead	ppm	ASTM D5185(m)	>18	0		
	Copper	ppm	ASTM D5185(m)	>80	<1		
	Tin	ppm	ASTM D5185(m)	>14	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	1		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1		
There is no indication of any contamination in the oil.	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*		0.1		
	Nitration	Abs/cm	ASTM D7624*	>20	6.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.1		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>158	1		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	8		
	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)	100	<1		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)	450	104		
	Calcium	ppm	ASTM D5185(m)	3000	2241		
	Phosphorus	ppm	ASTM D5185(m)	1150	841		
	Zinc	ppm	ASTM D5185(m)	1350	1034		
	Sulfur	ppm	ASTM D5185(m)	4250	2921		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	9.6		
	Visc @ 40°C	cSt	ASTM D7279(m)	115	90.8		
	Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.9		
	Viscosity Index (VI)	Scale	ASTM D2270*	126	140		





CALA ISO 17025:2017 Accredited Laboratory

Sample No.

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: VPA053429 Lab Number : 02637233 Unique Number : 5786395

Received : 23 May 2024 **Tested** Diagnosed

: 23 May 2024 : 23 May 2024 - Kevin Marson

Test Package : MOB 1 (Additional Tests: KV40, VI) 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.

MERCURY TRANSPORT

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