WEAR CONTAMINATION FLUID CONDITION

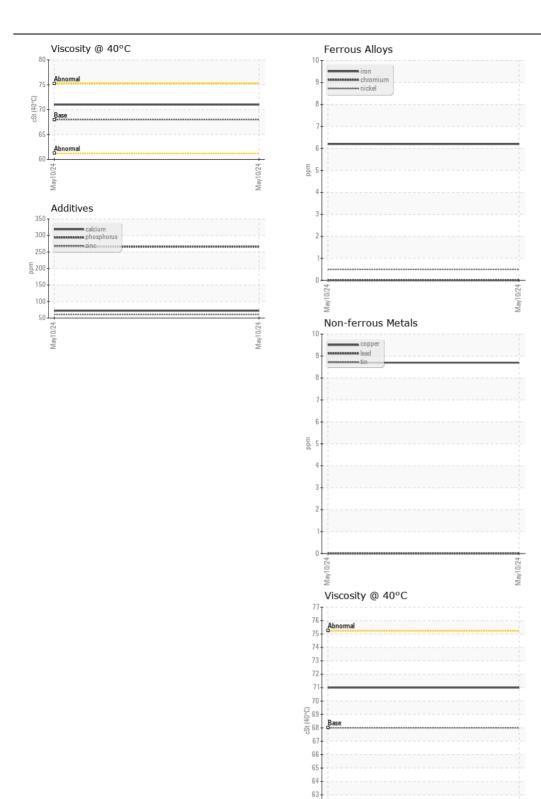
NORMAL NORMAL NORMAL

Machine Id

404.001 (S/N RRM300023238)

Component
Port Bow Thruster

Port Bow Thruster MOBIL MOBILGEAR 600 XP ISO 68 (800 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid. this testkit includes AN to determine the suitability of the oil for continued use.	Sample Number		Client Info		WC0935656		
	Sample Date		Client Info		10 May 2024		
	Machine Age	hrs	Client Info		6861		
	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				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	~9∩	6		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium		ASTM D5185(m)	>10	0		
	Silver	ppm	ASTM D5185(III) ASTM D5185(m)		0		
	Aluminum			>10	<1		
	Lead	ppm	ASTM D5185(m)	>20	0		
	Copper	ppm	ASTM D5185(m)	>20	9		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)	710	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
			VIOGGI	14014			
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>7	0		
There is no indication of any contamination in the component(unconfirmed).	Potassium	ppm	ASTM D5185(m)	>20	<1		
	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 D5185(m)		7		
Additive levels indicate the addition of a different brand, or type of oil.	Boron	ppm	ASTM D5185(m)		13		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		0		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		1		
	Calcium	ppm	ASTM D5185(m)		72		
	Phosphorus	ppm	ASTM D5185(m)		266		
	Zinc	ppm	ASTM D5185(m)		61		
	Sulfur	ppm	ASTM D5185(m)		8890		
	Visc @ 40°C	cSt	ASTM D7279(m)	68	71.0		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Horizon Maritime Services Ltd. - Dragon : WC0935656 Lab Number : 02636176 Unique Number : 5785338

Received **Tested** Diagnosed Test Package : MAR 1

: 16 May 2024 : 17 May 2024 - Kevin Marson

: 16 May 2024

Mulgrave, NS CA B0E 2G0 Contact: Service Manager

T: F:

422 Main Street

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.

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