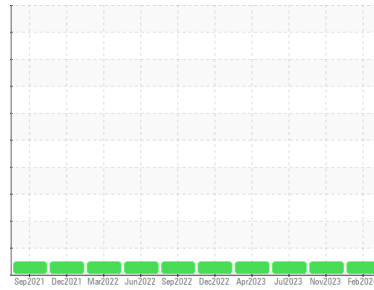




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Propulsion/Steering

Machine Id

Main Propulsion Thruster Port #4 (S/N C240558)

Component

4 Sternthruster

Fluid

MOBIL MOBILGEAR 600 XP ISO100 (3000 LTR)

DIAGNOSIS

Recommendation

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 3 test kits, this testkit includes AN to determine the suitability of the oil for continued use. this testkit includes Particle Count to determine the ISO cleanliness of the fluid. this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Wear

Component wear rates appear to be normal (unconfirmed).

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The condition of the oil is acceptable for the time in service (unconfirmed).

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0850505	WC0850475	WC0754019
Sample Date	Client Info		19 Feb 2024	11 Nov 2023	17 Jul 2023
Machine Age	hrs	Client Info	73510	72004	69368
Oil Age	hrs	Client Info	0	17094	14458
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>25	2	2
Chromium	ppm	ASTM D5185(m)	>3	0	0
Nickel	ppm	ASTM D5185(m)	>2	0	<1
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>2	0	0
Lead	ppm	ASTM D5185(m)	>3	0	0
Copper	ppm	ASTM D5185(m)	>3	<1	<1
Tin	ppm	ASTM D5185(m)	>3	0	0
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

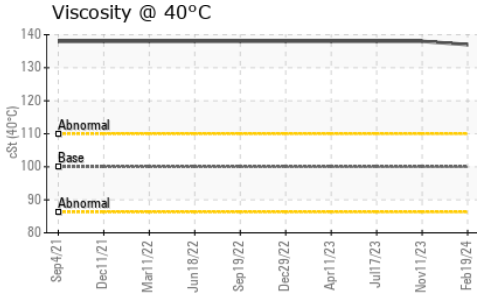
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	4
Barium	ppm	ASTM D5185(m)		0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		<1	0
Calcium	ppm	ASTM D5185(m)		1	2
Phosphorus	ppm	ASTM D5185(m)		323	326
Zinc	ppm	ASTM D5185(m)		3	4
Sulfur	ppm	ASTM D5185(m)		6757	6873
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>10	0	1
Sodium	ppm	ASTM D5185(m)		0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0



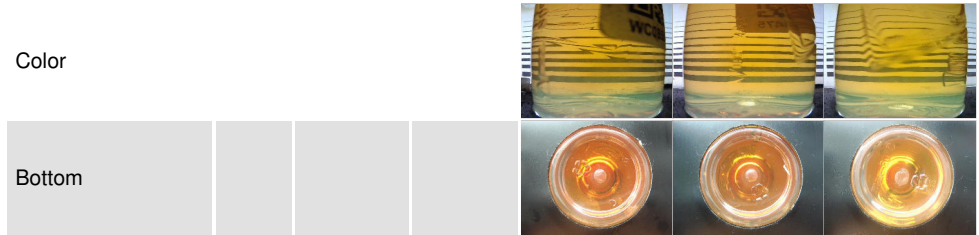
OIL ANALYSIS REPORT



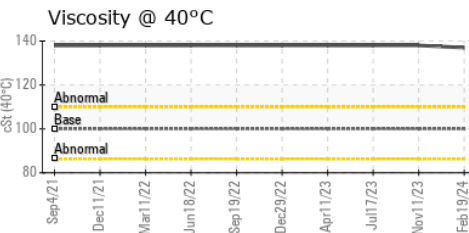
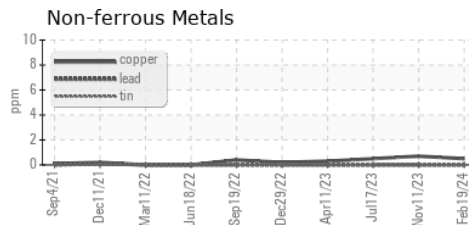
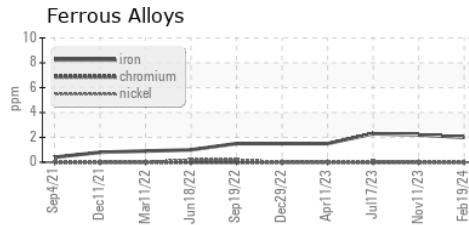
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	100	137	138

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Horizon Maritime Services Ltd. - Horizon Enabler**
Sample No. : WC0850505 **Received** : 22 Mar 2024 87 Water Street, 2nd Floor
Lab Number : **02623952** **Tested** : 22 Mar 2024 St. John's, NL
Unique Number : 5749071 **Diagnosed** : 22 Mar 2024 - Kevin Marson CA A1C 1A5
Test Package : MAR 1

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.

Contact: Stephen Nowlan
 Cheng.Enabler@northsea.no
 T:
 F: