



**POWER SYSTEMS**  
**SYSTÈMES DE PUISSANCE**

**OIL ANALYSIS REPORT**

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**MTU STBD GEARBOX**  
Component  
**Starboard Gearbox**  
Fluid  
**SAE 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WA0019256</b>	---	---
Sample Date		Client Info		<b>23 Dec 2023</b>	---	---
Machine Age	hrs	Client Info		<b>600</b>	---	---
Oil Age	hrs	Client Info		<b>150</b>	---	---
Filter Age	hrs	Client Info		<b>150</b>	---	---
Oil Changed		Client Info		<b>Not Changed</b>	---	---
Filter Changed		Client Info		<b>Not Changed</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>8</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>1</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>5</b>	---	---
Lead	ppm	ASTM D5185(m)	>50	<b>2</b>	---	---
Copper	ppm	ASTM D5185(m)	>200	<b>31</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

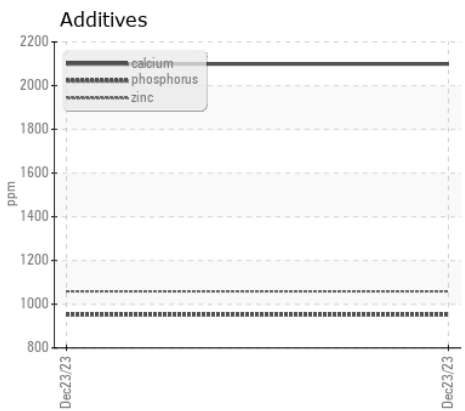
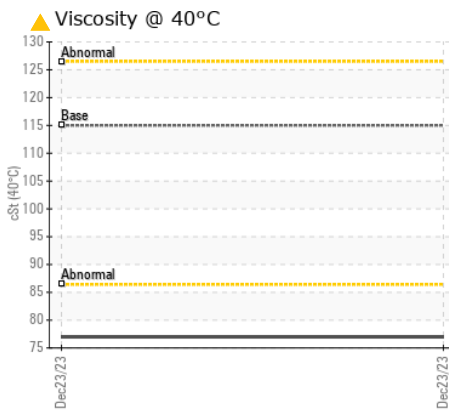
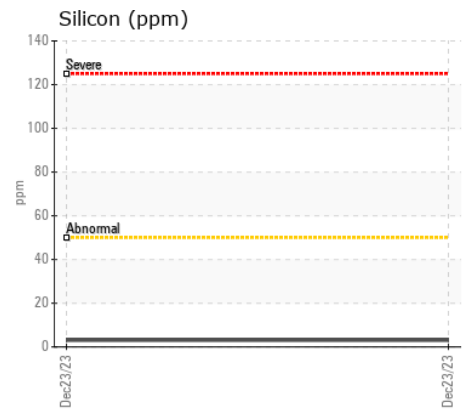
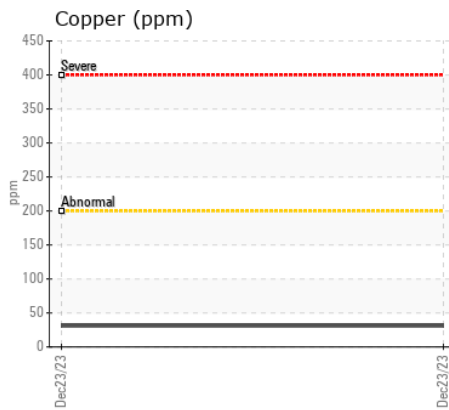
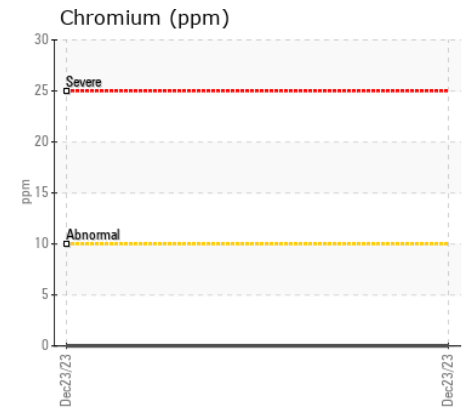
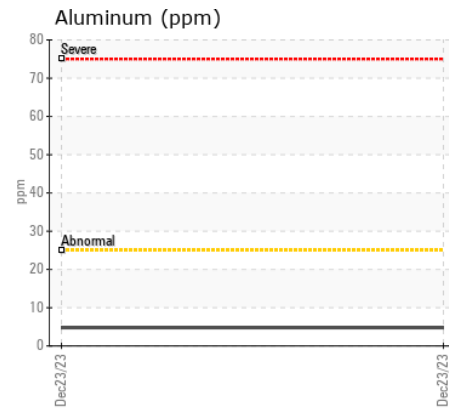
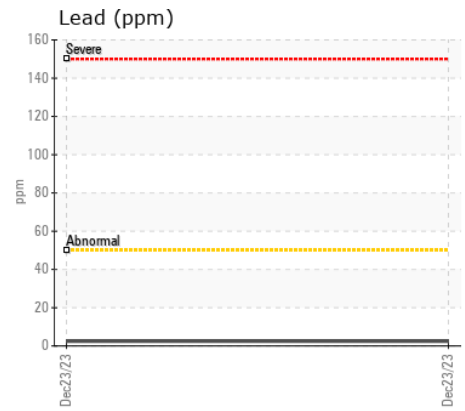
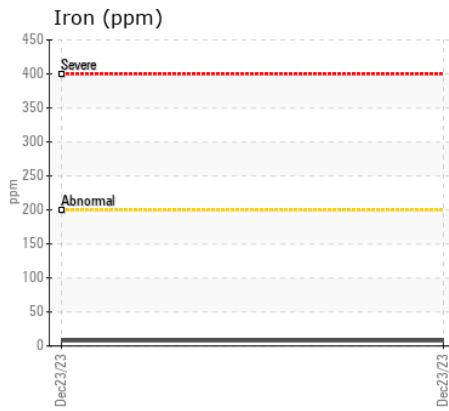
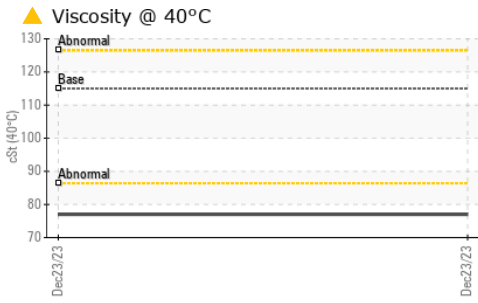
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	<b>3</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>8</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>57	<b>3</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>166</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>4</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>94</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>2099</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>952</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1059</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>3473</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	<b>▲ 77.0</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0019256 **Received** : 02 Jan 2024  
**Lab Number** : 02606062 **Tested** : 03 Jan 2024  
**Unique Number** : 5707148 **Diagnosed** : 03 Jan 2024 - Kevin Marson  
**Test Package** : MOB 1

**Canadian Coast Guard**  
 93 BOUNDARY ST  
 CLARK'S HARBOUR, NS  
 CA B0W 1P0  
 Contact: Service Manager  
 CLARKS-HARBOUR.CCGS@dfp-mpo.gc.ca  
 T:  
 F:

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.