



# OIL ANALYSIS REPORT

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

Machine Id  
**STBD SSG**  
Component  
**Starboard Genset**  
Fluid  
**SHELL 15W40 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0754197</b>	WC0754209	---
Sample Date		Client Info		<b>20 Feb 2024</b>	18 Sep 2023	---
Machine Age	hrs	Client Info		<b>4729</b>	0	---
Oil Age	hrs	Client Info		<b>441</b>	0	---
Filter Age	hrs	Client Info		<b>441</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	N/A	---
Filter Changed		Client Info		<b>Not Changd</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>11</b>	4	---
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>12	<b>1</b>	1	---
Lead	ppm	ASTM D5185(m)	>17	<b>1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>70	<b>4</b>	1	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

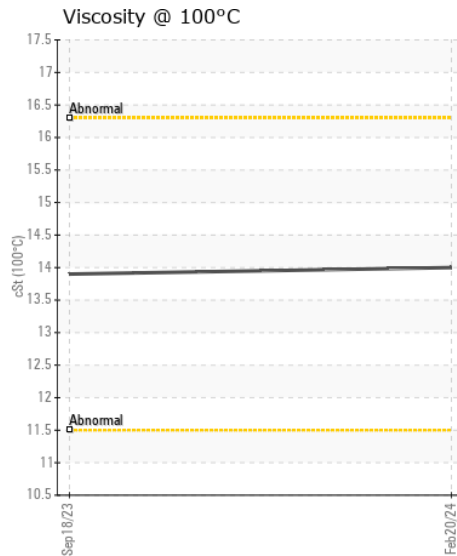
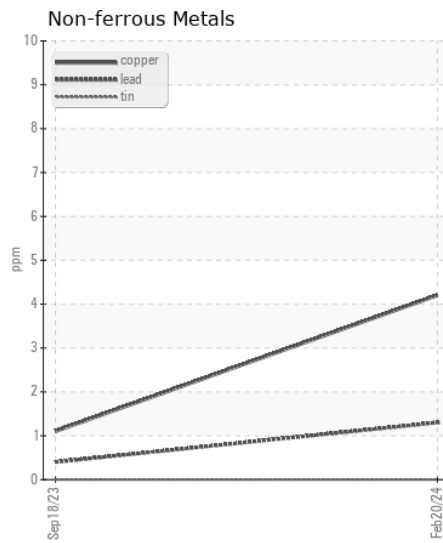
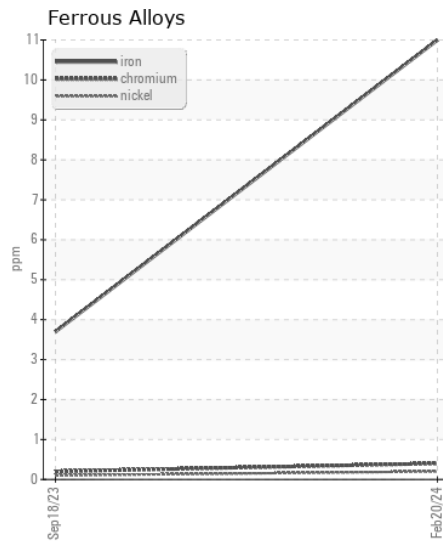
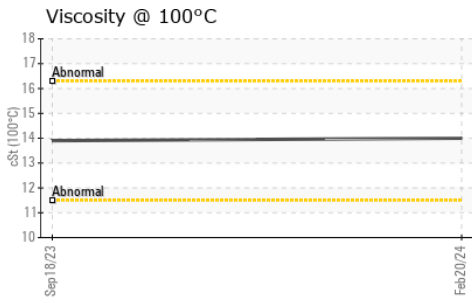
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	7	---
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*		<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.8</b>	8.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.3</b>	22.1	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>150	<b>2</b>	2	---
Boron	ppm	ASTM D5185(m)		<b>146</b>	119	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>14</b>	13	---
Calcium	ppm	ASTM D5185(m)		<b>2229</b>	2202	---
Phosphorus	ppm	ASTM D5185(m)		<b>968</b>	1035	---
Zinc	ppm	ASTM D5185(m)		<b>1145</b>	1159	---
Sulfur	ppm	ASTM D5185(m)		<b>3065</b>	2923	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.7</b>	19.8	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>14.0</b>	13.9	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0754197  
**Lab Number** : 02618888  
**Unique Number** : 5735998  
**Test Package** : MAR 1  
**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**CANADIAN COAST GUARD**  
 CCGS CARIBOUS ISLE, 867 Lakeshore Rd  
 Burlington, ON  
 CA L7S 1A1  
 Contact: Chief Engineer  
 CaribouIsleCE@ccgs-ngcc.gc.ca  
 T:  
 F: (705)942-5739

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.