



# OIL ANALYSIS REPORT

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

Machine Id  
**HL23226 - Stbd Shaft Thrust Bearing**  
 Component  
**Starboard Thrust Bearing**  
 Fluid  
**ESSO TERESSTIC ISO 100 (168 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0929745</b>	WC0709120	WC0552058
Sample Date		Client Info		<b>30 May 2024</b>	21 Mar 2023	17 Oct 2021
Machine Age	hrs	Client Info		<b>0</b>	71760	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	N/A
Filter Changed		Client Info		<b>None</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>85	<b>8</b>	13	2
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>60	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>7	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>40	<b>8</b>	11	4
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	▲ LIGHT	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

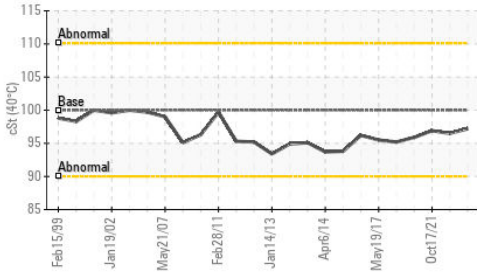
Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Water		WC Method	>2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

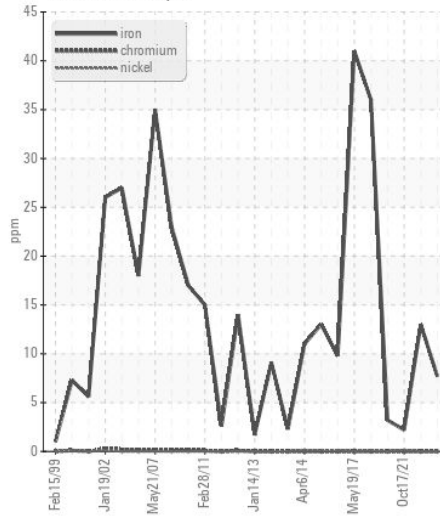
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Boron	ppm	ASTM D5185(m)	.2	<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1.2	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m)	.2	<b>&lt;1</b>	0	2
Phosphorus	ppm	ASTM D5185(m)	2.4	<b>8</b>	8	8
Zinc	ppm	ASTM D5185(m)	1.9	<b>8</b>	9	9
Sulfur	ppm	ASTM D5185(m)	2250	<b>5178</b>	4458	4218
Visc @ 40°C	cSt	ASTM D7279(m)	100	<b>97.2</b>	96.5	96.9

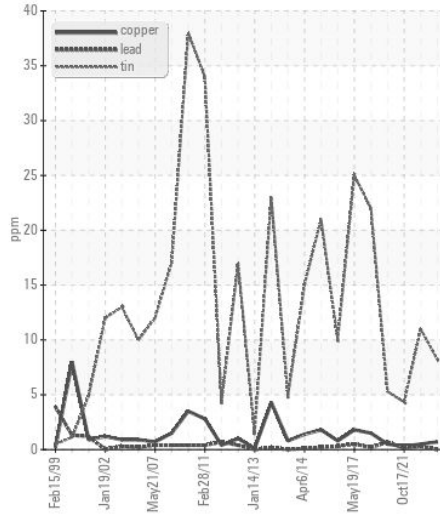
Viscosity @ 40°C



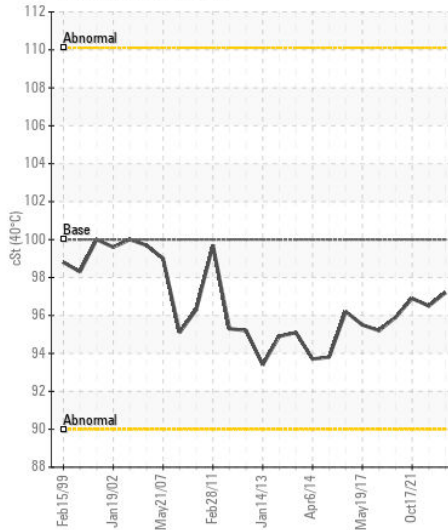
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0929745  
**Lab Number** : 02639901  
**Unique Number** : 5789063  
**Test Package** : MAR 1 ( Additional Tests: BottomAnalysis, FilterPatch )

**Received** : 05 Jun 2024  
**Tested** : 06 Jun 2024  
**Diagnosed** : 06 Jun 2024 - Kevin Marson

**CANADIAN COAST GUARD**  
 CCGS HENRY LARSEN, P.O. BOX 5667, 280 SOUTHSIDE RD.  
 ST. JOHN'S, NL  
 CA A1C 5X1  
 Contact: Chief Engineer  
 henrylarsence@ccgs-ngcc.gc.ca  
 T: (709)687-5198  
 F: (709)685-3187

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.