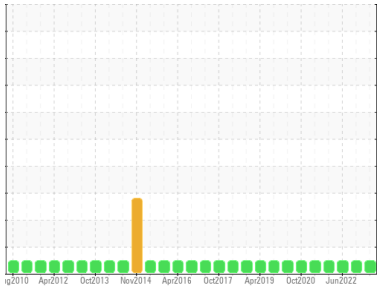
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
GENERAL ELECTRIC SLSMC G1
Component
Circulating Turbine
Fluid
ESSO NUTO H ISO 68 (450 LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0690613**	WC0690611	WC0346523
Sample Date		Client Info		**26 Apr 2023**	26 Oct 2022	30 Jun 2022
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**59**	53	48
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>15	**1**	1	1
Chromium	ppm	ASTM D5185(m)	>4	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**<1**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	1	0
Aluminum	ppm	ASTM D5185(m)	>10	**0**	0	0
Lead	ppm	ASTM D5185(m)		**3**	3	3
Copper	ppm	ASTM D5185(m)	>5	**18**	18	17
Tin	ppm	ASTM D5185(m)	>5	**1**	1	1
Antimony	ppm	ASTM D5185(m)		**<1**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

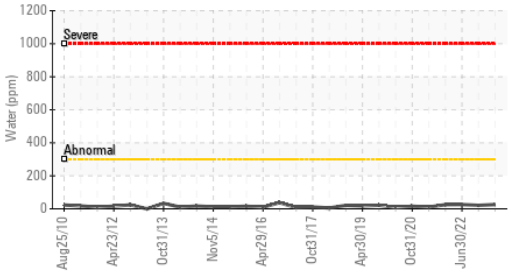
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**0**	0	0
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	5	**<1**	0	<1
Calcium	ppm	ASTM D5185(m)	50	**45**	45	45
Phosphorus	ppm	ASTM D5185(m)	330	**379**	381	343
Zinc	ppm	ASTM D5185(m)	420	**422**	428	431
Sulfur	ppm	ASTM D5185(m)	3100	**5436**	5462	5451
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**<1**	<1	<1
Sodium	ppm	ASTM D5185(m)		**0**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	0
Water	%	ASTM D6304*	>0.03	**0.003**	0.002	0.003
ppm Water	ppm	ASTM D6304*	>300	**25.7**	20.9	25.9

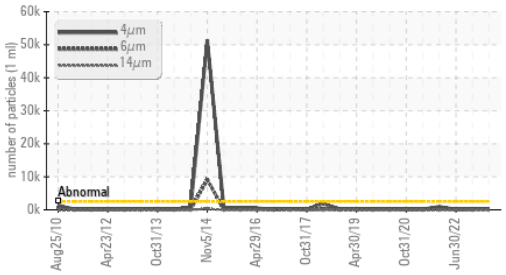
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**312**	298	101
Particles >6µm		ASTM D7647	>640	**119**	85	35
Particles >14µm		ASTM D7647	>80	**12**	6	4
Particles >21µm		ASTM D7647	>20	**4**	2	1
Particles >38µm		ASTM D7647	>4	**0**	1	0
Particles >71µm		ASTM D7647	>3	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**15/14/11**	15/14/10	14/12/9

OIL ANALYSIS REPORT

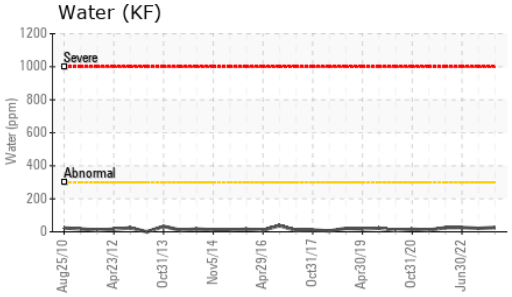
Water (KF)



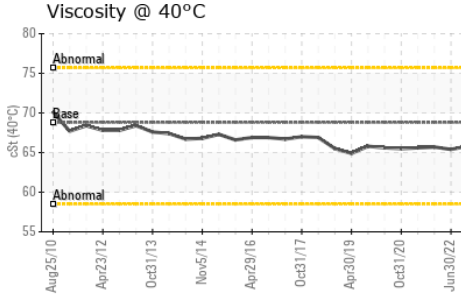
Particle Trend



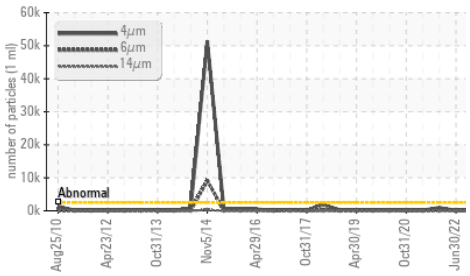
Water (KF)



Viscosity @ 40°C



Particle Trend

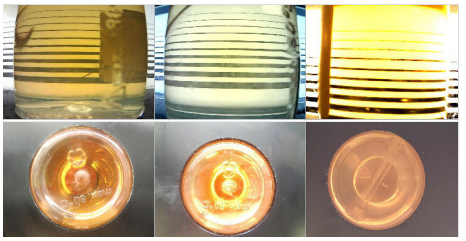


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	**0.41**	0.32	0.38

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.03	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

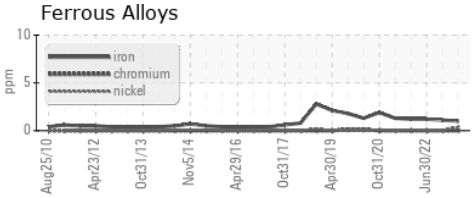
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	**65.8**	65.8	65.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

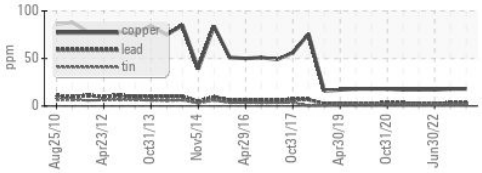


GRAPHS

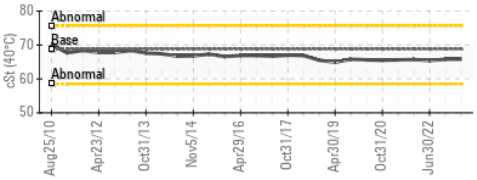
Ferrous Alloys



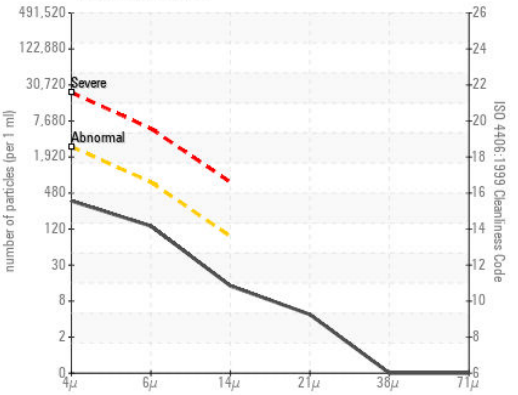
Non-ferrous Metals



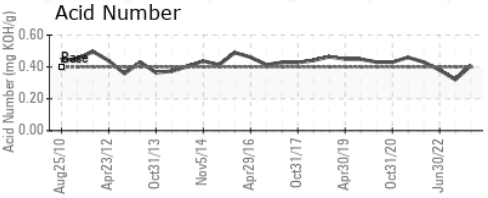
Viscosity @ 40°C



Particle Count



Acid Number



CALA
ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0690613	**Received**	: 28 Apr 2023
Lab Number	: 02554129	**Diagnosed**	: 01 May 2023
Unique Number	: 5567144	**Diagnostician**	: Kevin Marson
Test Package	: IND 2		

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.

ST. LAWRENCE SEAWAY AUTHORITY
508 GLENDALE AVENUE, P.O. BOX 370
ST. CATHARINES, ON
CA L2R 6V8
Contact: Scott Frick
sfrick@seaway.ca
T: (905)641-1932
F: (905)641-1745