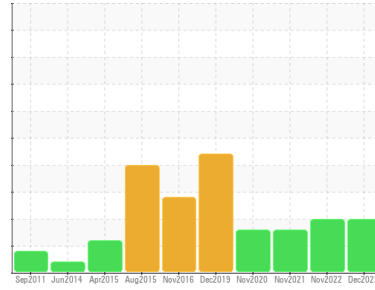




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
GENERAL ELECTRIC EAGLE G.S. UPPER BEARING (S/N 132415)
 Component
Turbine
 Fluid
ESSO TERESSO ISO 68 (220 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

Tin ppm levels are abnormal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0666787	WC0666772	WC0524694
Sample Date	Client Info		19 Dec 2023	23 Nov 2022	20 Nov 2021
Machine Age	yrs	Client Info	95	94	93
Oil Age	yrs	Client Info	4	3	11
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>15	14	12	11
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<1	0	0
Lead	ppm	ASTM D5185(m)		<1	<1	<1
Copper	ppm	ASTM D5185(m)	>5	1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	▲ 20	▲ 18	▲ 16
Antimony	ppm	ASTM D5185(m)		<1	1	1
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)	4.5	0	<1	<1
Barium	ppm	ASTM D5185(m)	0.4	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<1	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)	0	0	0	0
Calcium	ppm	ASTM D5185(m)	0	<1	<1	1
Phosphorus	ppm	ASTM D5185(m)	0.7	66	73	67
Zinc	ppm	ASTM D5185(m)	0	15	15	13
Sulfur	ppm	ASTM D5185(m)	1315	264	275	250
Lithium	ppm	ASTM D5185(m)		<1	<1	0

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	0	0	0
Sodium	ppm	ASTM D5185(m)		0	<1	0
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
Water	%	ASTM D6304*	>0.03	0.002	0.001	0.001
ppm Water	ppm	ASTM D6304*	>300	21	12.9	8.9

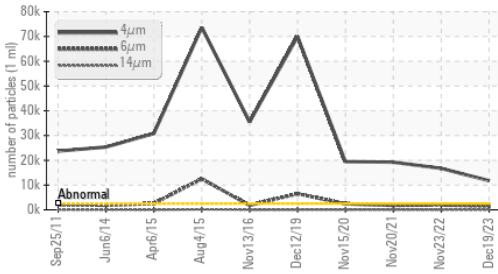
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 11762	▲ 16729	▲ 19235
Particles >6µm	ASTM D7647	>640	▲ 1475	▲ 1907	▲ 1781
Particles >14µm	ASTM D7647	>80	35	29	47
Particles >21µm	ASTM D7647	>20	9	5	12
Particles >38µm	ASTM D7647	>4	2	1	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/18/12	▲ 21/18/12	▲ 21/18/13

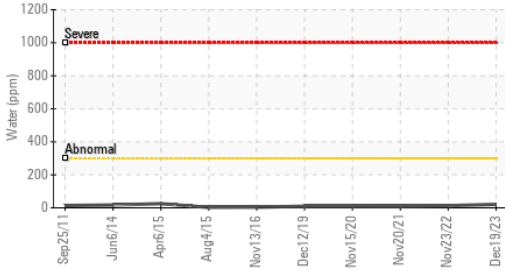


OIL ANALYSIS REPORT

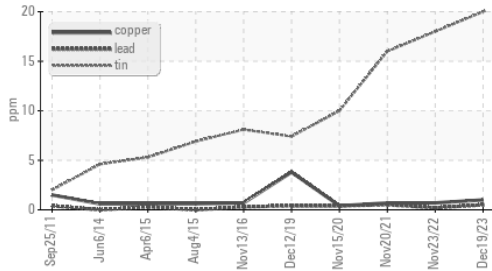
Particle Trend



Water (KF)



Non-ferrous Metals



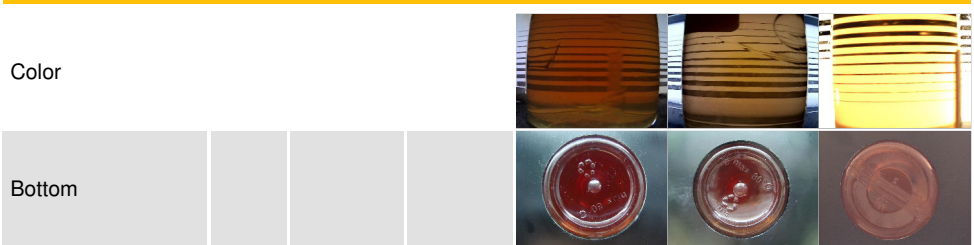
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN) mg KOH/g	ASTM D974*	0.02	0.11	0.10	0.11	
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

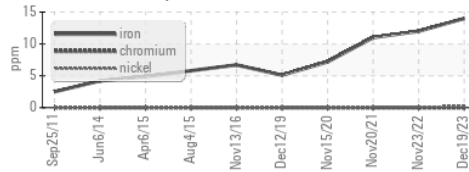
method	limit/base	current	history1	history2	
Visc @ 40°C cSt	ASTM D7279(m)	68	60.4	60.0	59.8

SAMPLE IMAGES

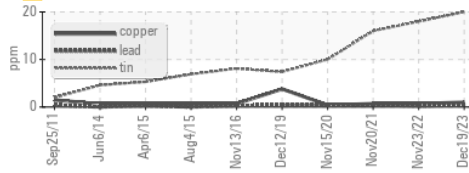


GRAPHS

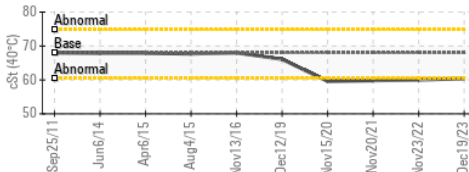
Ferrous Alloys



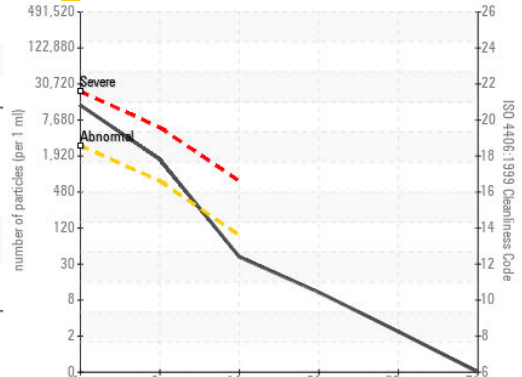
Non-ferrous Metals



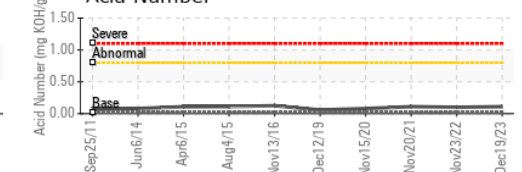
Viscosity @ 40°C



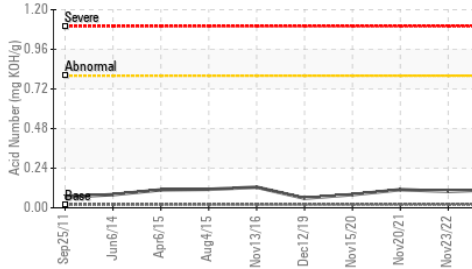
Particle Count



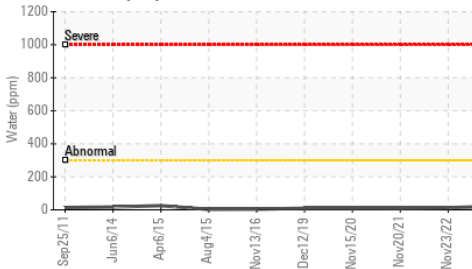
Acid Number



Acid Number



Water (KF)



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0666787
Lab Number : 02605541
Unique Number : 5698626
Test Package : IND 2

Received : 28 Dec 2023
Diagnosed : 02 Jan 2024
Diagnostician : Kevin Marson

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.

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