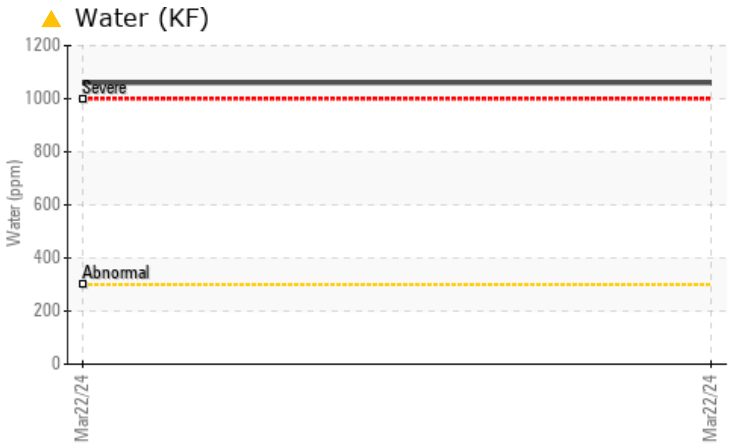
PROBLEM SUMMARY

Sample Rating Trend

WATER

Machine Id
GAF BEAST T-1 (S/N D-4229)
Component
Turbine
Fluid
MOBIL VG 68 (1 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Water	%	ASTM D6304	>0.03	▲ **0.106**	---	---
ppm Water	ppm	ASTM D6304	>300	▲ **1060**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---
Emulsified Water	scalar	*Visual	>0.03	▲ **0.2%**	---	---
Free Water	scalar	*Visual		▲ **>10%**	---	---

Customer Id: ENEFAR
Sample No.: WC0713665
Lab Number: 06138536
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Machine Id
GAF BEAST T-1 (S/N D-4229)
Component
Turbine
Fluid
MOBIL VG 68 (1 GAL)

DIAGNOSIS

Recommendation
We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

Contamination
Appearance is unacceptable Excessive free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0713665**	---	---
Sample Date		Client Info		**22 Mar 2024**	---	---
Machine Age	hrs	Client Info		**3600**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	**10**	---	---
Chromium	ppm	ASTM D5185m	>4	**<1**	---	---
Nickel	ppm	ASTM D5185m	>2	**0**	---	---
Titanium	ppm	ASTM D5185m		**<1**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>10	**2**	---	---
Lead	ppm	ASTM D5185m		**2**	---	---
Copper	ppm	ASTM D5185m	>5	**7**	---	---
Tin	ppm	ASTM D5185m	>5	**3**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**<1**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m		**8**	---	---
Phosphorus	ppm	ASTM D5185m		**135**	---	---
Zinc	ppm	ASTM D5185m		**16**	---	---
Sulfur	ppm	ASTM D5185m		**1259**	---	---

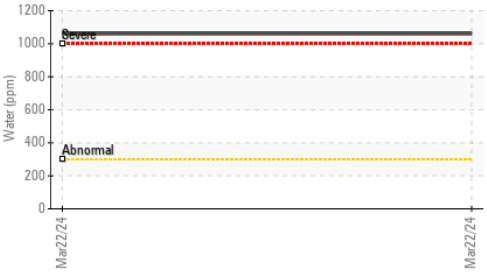
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	---	---
Sodium	ppm	ASTM D5185m		**<1**	---	---
Potassium	ppm	ASTM D5185m	>20	**<1**	---	---
Water	%	ASTM D6304	>0.03	▲ **0.106**	---	---
ppm Water	ppm	ASTM D6304	>300	▲ **1060**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	---	---
Nitration	Abs/cm	*ASTM D7624		**2.4**	---	---
Sulfation	Abs/.1mm	*ASTM D7415		**10.9**	---	---

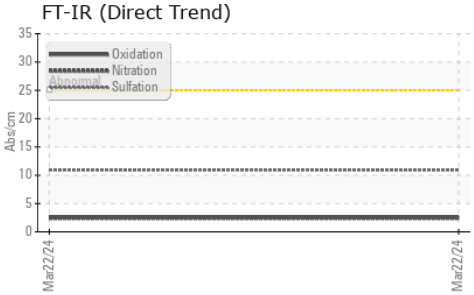
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		**2.5**	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.12**	---	---

OIL ANALYSIS REPORT

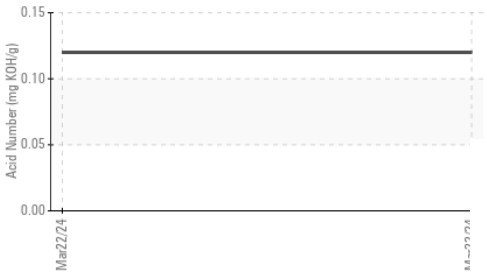
Water (KF)



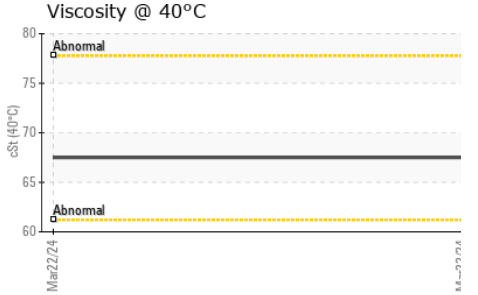
FT-IR (Direct Trend)



Acid Number

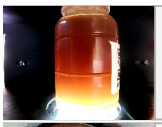


Viscosity @ 40°C



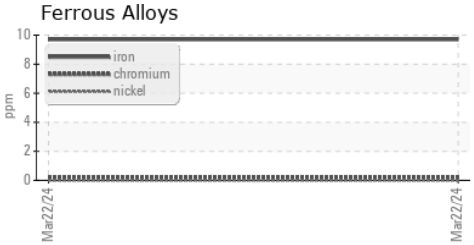
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	● **HAZY**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.03	▲ **0.2%**	---	---
Free Water	scalar	*Visual		▲ **>10%**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**67.5**	---	---

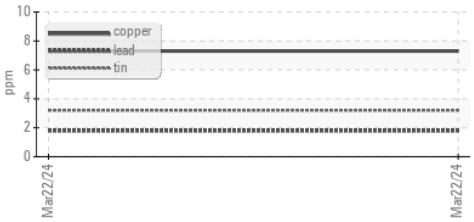
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

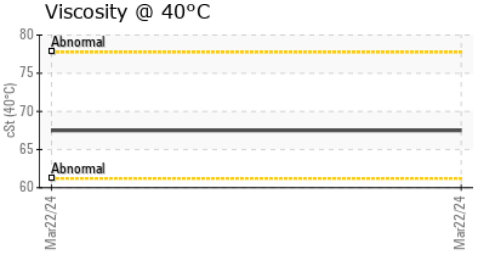
Ferrous Alloys



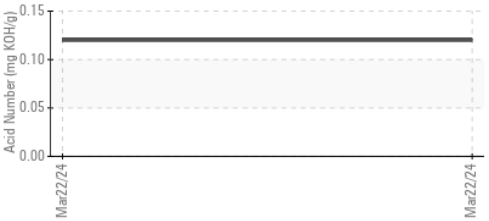
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0713665 **Received** : 04 Apr 2024
Lab Number : 06138536 **Tested** : 10 Apr 2024
Unique Number : 10963344 **Diagnosed** : 10 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, KF)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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