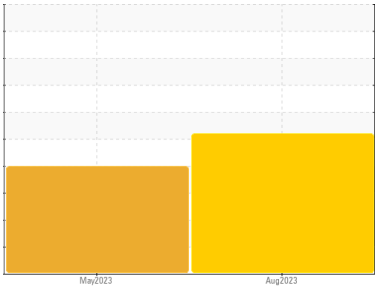
PROBLEM SUMMARY

Sample Rating Trend

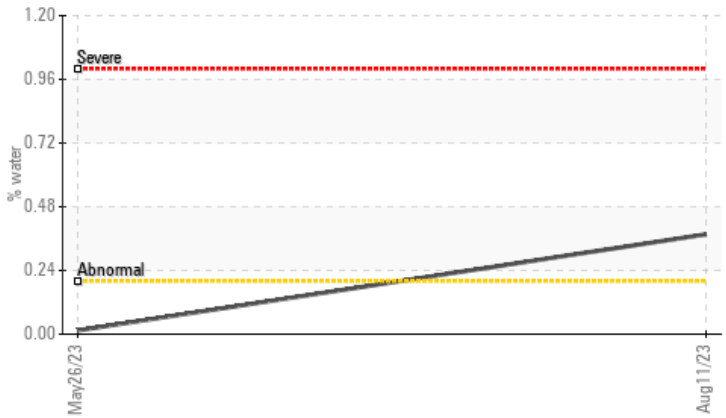


WATER

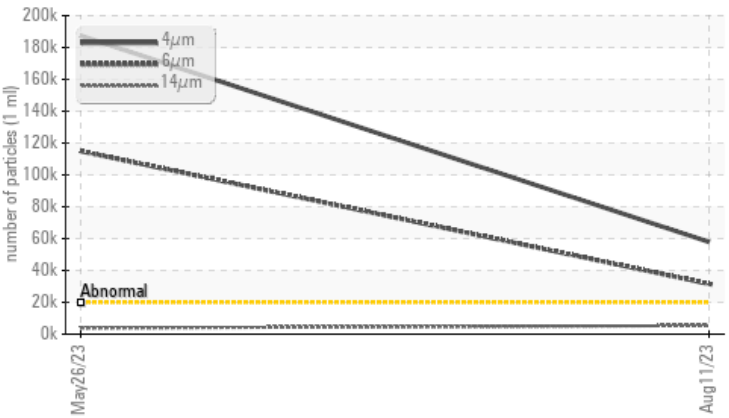
Area
Paper Machine
Machine Id
#3 Dryer Section Drive Gearbox
Component
Gearbox
Fluid
MOBIL MOBILGEAR SHC 320 (--- GAL)

COMPONENT CONDITION SUMMARY

Water



Particle Trend



RECOMMENDATION

We advise that you check for the source of water entry. 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 at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	SEVERE	---
Water	%	ASTM D6304	>0.2	▲ **0.376**	0.014	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3760**	143.7	---
Particles >4µm		ASTM D7647	>20000	▲ **57887**	⬢ 187448	---
Particles >6µm		ASTM D7647	>5000	▲ **31535**	⬢ 114918	---
Particles >14µm		ASTM D7647	>640	▲ **5367**	▲ 3834	---
Particles >21µm		ASTM D7647	>160	▲ **1808**	81	---
Particles >38µm		ASTM D7647	>40	▲ **279**	0	---
Particles >71µm		ASTM D7647	>10	▲ **28**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **23/22/20**	⬢ 25/24/19	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	---

Customer Id: CASASH
Sample No.: WC0776566
Lab Number: 05927237
Test Package: PLANT

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.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

26 May 2023 Diag: Wes Davis

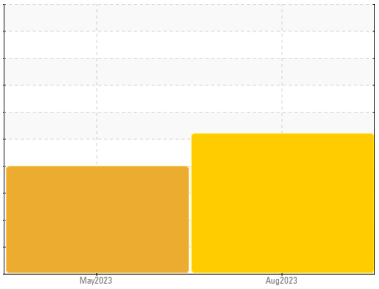
ISO

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
Paper Machine
Machine Id
#3 Dryer Section Drive Gearbox
Component
Gearbox
Fluid
MOBIL MOBILGEAR SHC 320 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. 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 at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Appearance is unacceptable There is a high amount of particulates present in the oil. There is a moderate concentration of water present in the oil.

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		**WC0776566**	WC0776585	---
Sample Date		Client Info		**11 Aug 2023**	26 May 2023	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	SEVERE	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**14**	12	---
Chromium	ppm	ASTM D5185m	>15	**<1**	0	---
Nickel	ppm	ASTM D5185m	>15	**0**	0	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>25	**<1**	0	---
Lead	ppm	ASTM D5185m	>100	**<1**	0	---
Copper	ppm	ASTM D5185m	>200	**1**	2	---
Tin	ppm	ASTM D5185m	>25	**0**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**55**	65	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**<1**	<1	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**2**	1	---
Calcium	ppm	ASTM D5185m		**2**	2	---
Phosphorus	ppm	ASTM D5185m		**402**	477	---
Zinc	ppm	ASTM D5185m		**0**	4	---
Sulfur	ppm	ASTM D5185m		**2937**	3206	---

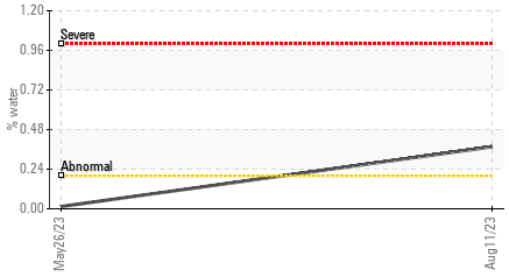
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**11**	19	---
Sodium	ppm	ASTM D5185m		**28**	29	---
Potassium	ppm	ASTM D5185m	>20	**7**	4	---
Water	%	ASTM D6304	>0.2	▲ **0.376**	0.014	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3760**	143.7	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **57887**	⬢ 187448	---
Particles >6µm		ASTM D7647	>5000	▲ **31535**	⬢ 114918	---
Particles >14µm		ASTM D7647	>640	▲ **5367**	▲ 3834	---
Particles >21µm		ASTM D7647	>160	▲ **1808**	81	---
Particles >38µm		ASTM D7647	>40	▲ **279**	0	---
Particles >71µm		ASTM D7647	>10	▲ **28**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **23/22/20**	⬢ 25/24/19	---

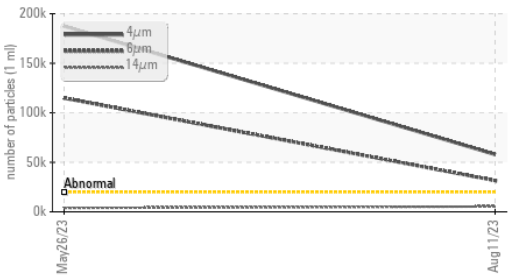
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.73**	0.76	---

OIL ANALYSIS REPORT

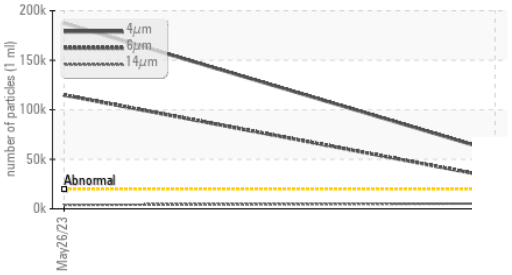
Water



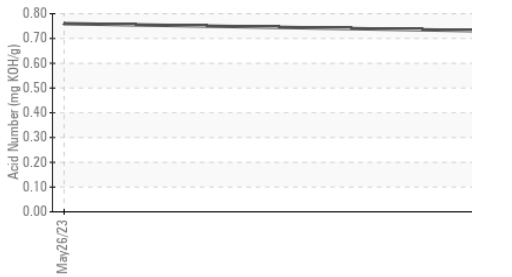
Particle Trend



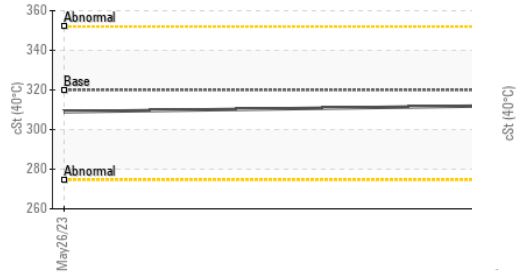
Particle Trend



Acid Number

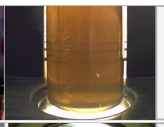
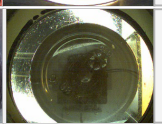


Viscosity @ 40°C



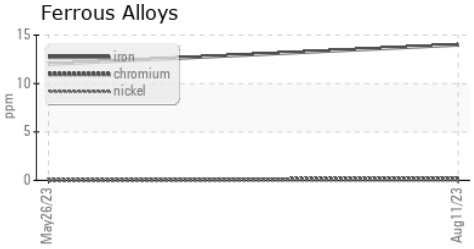
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	**312**	309	---

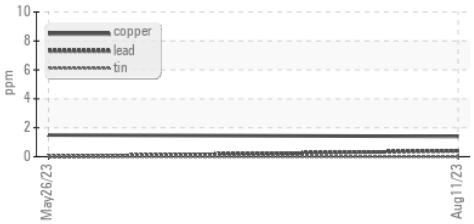
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					no image
Bottom					no image

GRAPHS

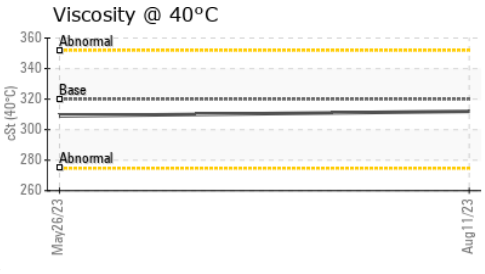
Ferrous Alloys



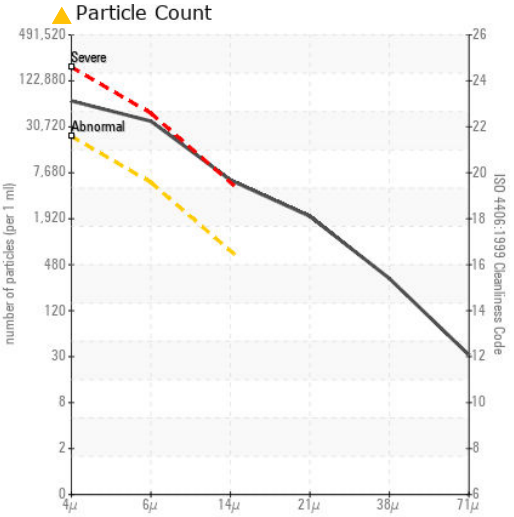
Non-ferrous Metals



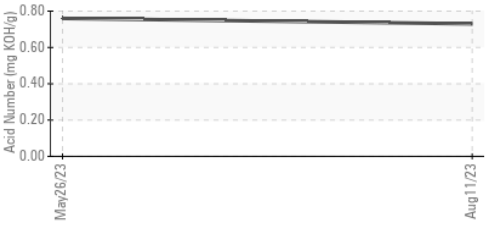
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776566
Lab Number : 05927237
Unique Number : 10607184
Test Package : PLANT

Received : 17 Aug 2023
Diagnosed : 22 Aug 2023
Diagnostician : Jonathan Hester

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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