



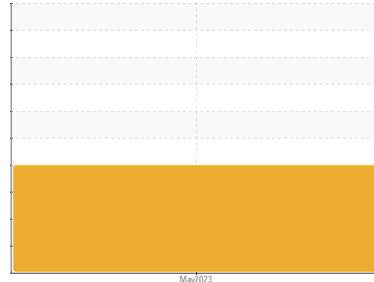
# PROBLEM SUMMARY

Sample Rating Trend

ISO

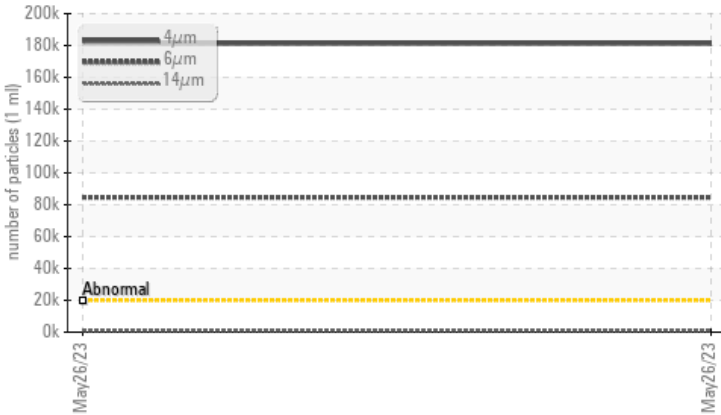


Area  
**Paper Machine**  
 Machine Id  
**#2 Dryer Section Drive Gearbox**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL MOBILGEAR SHC 320 (--- GAL)**



## COMPONENT CONDITION SUMMARY

### Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Particles >4µm	ASTM D7647	>20000	🔴	<b>181260</b>	---	---
Particles >6µm	ASTM D7647	>5000	🔴	<b>84601</b>	---	---
Particles >14µm	ASTM D7647	>640	🟡	<b>1043</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	🔴	<b>25/24/17</b>	---	---

Customer Id: CASASH  
 Sample No.: WC0776587  
 Lab Number: 05867273  
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Aug 18 2023	?	We recommend you service the filters on this component.
Resample	MISSED	Aug 18 2023	?	Resample in 30-45 days to monitor this situation.
Information Required	MISSED	Aug 18 2023	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	MISSED	Aug 18 2023	?	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.
Check Seals	MISSED	Aug 18 2023	?	Check seals and/or filters for points of contaminant entry.

## HISTORICAL DIAGNOSIS



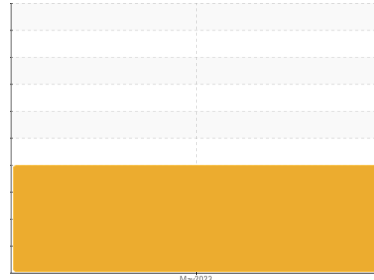
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



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



## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is a high 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		<b>WC0776587</b>	---	---
Sample Date	Client Info		<b>26 May 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>40</b>	---	---
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	---	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >200	<b>5</b>	---	---
Tin	ppm	ASTM D5185m >25	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>6</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>1</b>	---	---
Calcium	ppm	ASTM D5185m	<b>5</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>457</b>	---	---
Zinc	ppm	ASTM D5185m	<b>8</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>4326</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>19</b>	---	---
Sodium	ppm	ASTM D5185m	<b>5</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	---	---
Water	%	ASTM D6304 >0.2	<b>0.008</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>89.4</b>	---	---

## FLUID CLEANLINESS

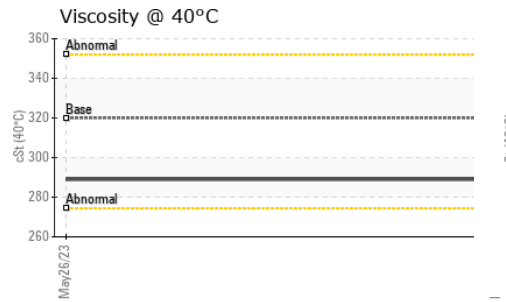
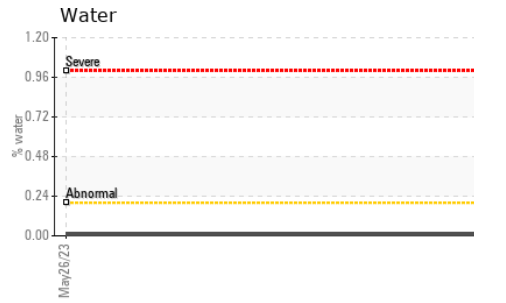
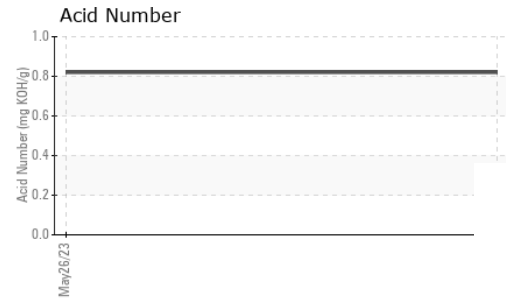
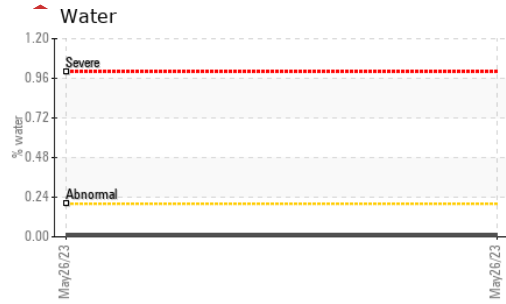
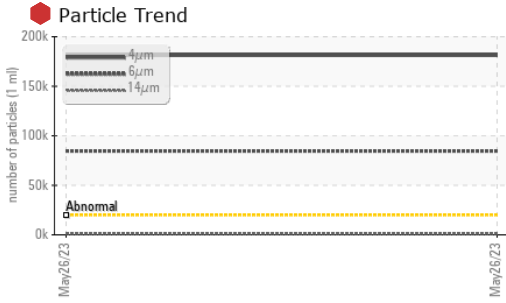
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>181260</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>84601</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>1043</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>80</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>25/24/17</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.82</b>	---	---



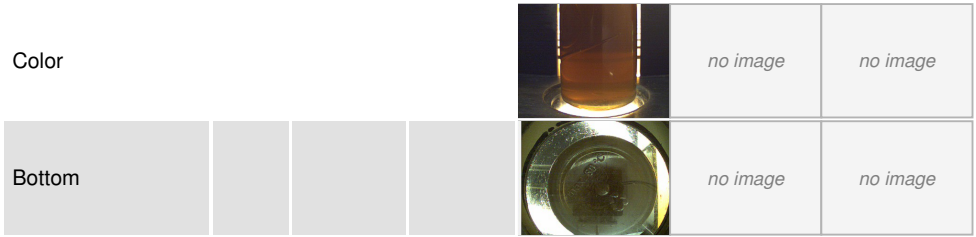
# OIL ANALYSIS REPORT



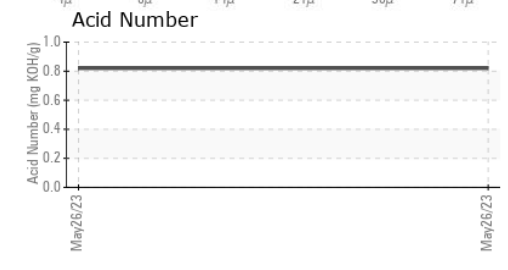
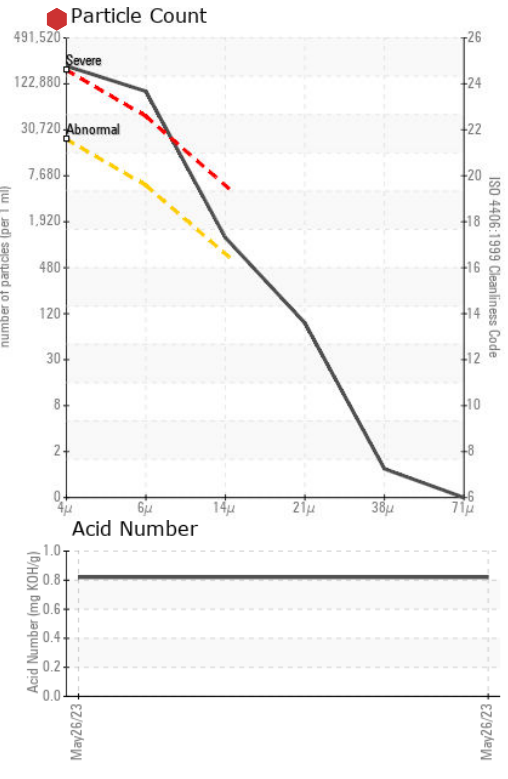
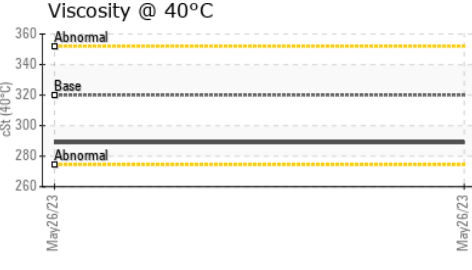
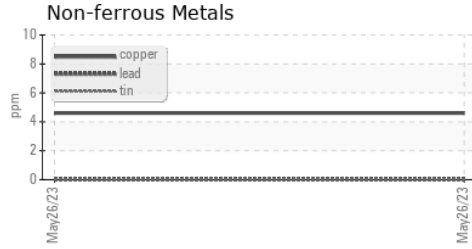
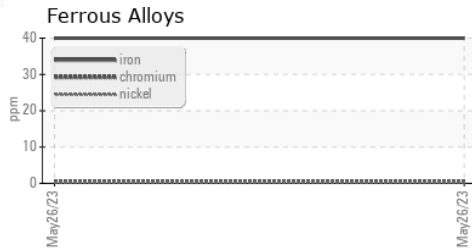
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	289	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0776587 **Received** : 07 Jun 2023  
**Lab Number** : 05867273 **Diagnosed** : 08 Jun 2023  
**Unique Number** : 10507057 **Diagnostician** : Wes Davis  
**Test Package** : PLANT

CASCADES CONTAINERBOARD PACKAGING - BEARPACK PROJECT  
 10026 OLD RIDGE ROAD  
 ASHLAND, VA  
 US 23005  
 Contact: MARC-ANDRE HUBERT  
 marc-andre\_hubert@cascades.com

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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F: