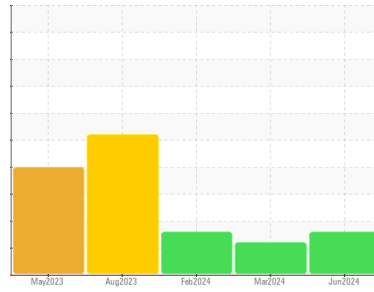




# OIL ANALYSIS REPORT

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. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

### Wear

All component wear rates are normal.

### Contamination

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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0776532</b>	WC0776520	WC0776356
Sample Date	Client Info		<b>06 Jun 2024</b>	04 Mar 2024	22 Feb 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>9</b>	3	13
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	0	2
Tin	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>8</b>	19	47
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	1	6
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Calcium	ppm	ASTM D5185m		<b>1</b>	2	2
Phosphorus	ppm	ASTM D5185m		<b>404</b>	428	307
Zinc	ppm	ASTM D5185m		<b>12</b>	10	9
Sulfur	ppm	ASTM D5185m		<b>3004</b>	2078	2292

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>9</b>	10	10
Sodium	ppm	ASTM D5185m		<b>4</b>	11	25
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	3
Water	%	ASTM D6304	>0.2	<b>▲ 0.705</b>	0.102	▲ 0.747
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 7050</b>	1020	▲ 7470

## FLUID CLEANLINESS

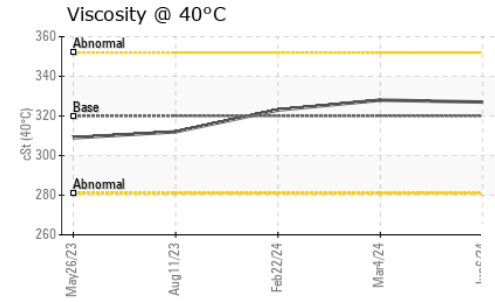
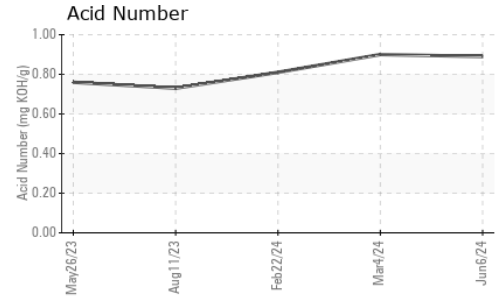
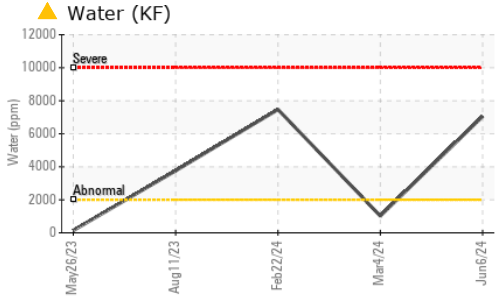
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	▲ 75744	---
Particles >6µm	ASTM D7647	>5000	---	▲ 10677	---
Particles >14µm	ASTM D7647	>640	---	106	---
Particles >21µm	ASTM D7647	>160	---	21	---
Particles >38µm	ASTM D7647	>40	---	8	---
Particles >71µm	ASTM D7647	>10	---	8	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	▲ 23/21/14	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.89</b>	0.90	0.81



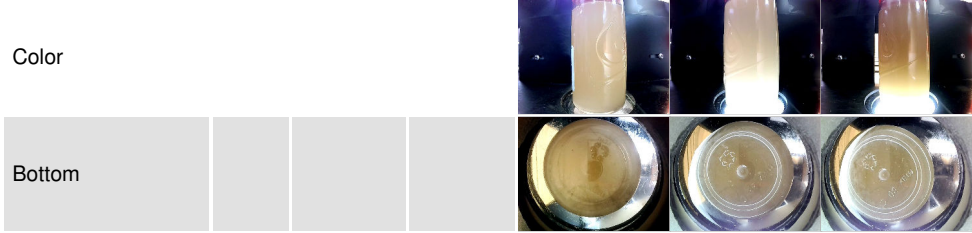
# OIL ANALYSIS REPORT



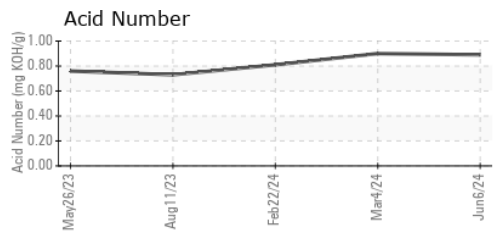
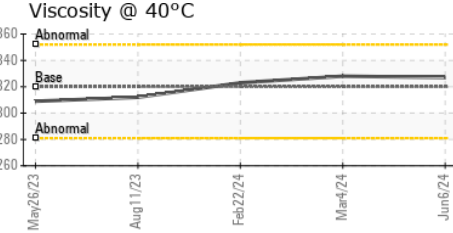
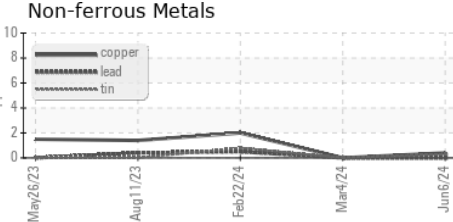
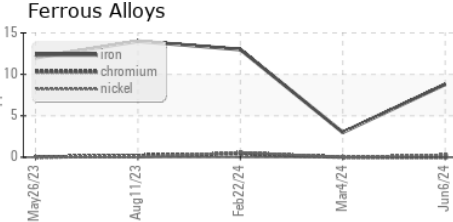
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 320	<b>327</b>	328	323

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0776532      **Received** : 10 Jun 2024  
**Lab Number** : 06204639      **Tested** : 12 Jun 2024  
**Unique Number** : 11072100      **Diagnosed** : 12 Jun 2024 - Doug Bogart  
**Test Package** : PLANT

CASCADES CONTAINERBOARD PACKAGING - BEARPACK PROJECT  
 10026 OLD RIDGE ROAD  
 ASHLAND, VA 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)