

## **PROBLEM SUMMARY**

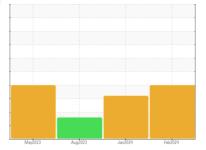
# Sample Rating Trend



# Paper Machine #2 Dryer Section Drive Gearbox

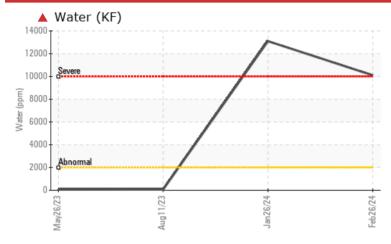
Component Gearbox

**MOBIL MOBILGEAR SHC 320 (--- GAL)** 





#### COMPONENT CONDITION SUMMARY



#### **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. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

PROBLEMATIC TEST RESULTS								
Sample Status				SEVERE	SEVERE	ABNORMAL		
Water	%	ASTM D6304	>0.2	<b>1.01</b>	<b>1.31</b>	0.007		
ppm Water	ppm	ASTM D6304	>2000	<b>1</b> 0100	<b>1</b> 3100	70.9		
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	A 0.2%	NFG		

Customer Id: CASASH Sample No.: WC0776355 Lab Number: 06101601 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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.		
Resample			?	We recommend an early resample to monitor this condition.		
Check Water Access			?	We advise that you check for the source of water entry.		

#### HISTORICAL DIAGNOSIS

#### 26 Jan 2024 Diag: Don Baldridge

#### WATER



We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count. All component wear rates are normal. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid.



#### 11 Aug 2023 Diag: Don Baldridge

#### ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

# View report

#### 26 May 2023 Diag: Wes Davis

#### 150



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.





# **OIL ANALYSIS REPORT**





# Paper Machine #2 Dryer Section Drive Gearbox

Gearbox

**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. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

#### Wear

All component wear rates are normal.

#### Contamination

Appearance is milky. There is a high concentration of water present in the oil.

#### **Fluid Condition**

The AN level is acceptable for this fluid.

		May202	3 Aug <sup>2</sup> 023	Jan 2024 F	eb2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0776355	WC0776501	WC0776606
Sample Date		Client Info		26 Feb 2024	26 Jan 2024	11 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	42	60	28
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Lead	ppm	ASTM D5185m	>100	0	0	<1
Copper	ppm	ASTM D5185m	>200	3	10	10
Tin	ppm	ASTM D5185m	>25	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	5	4
Barium	ppm	ASTM D5185m		<1	<1	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	2	3
Calcium	ppm	ASTM D5185m		6	5	2
Phosphorus	ppm	ASTM D5185m		391	458	483
Zinc	ppm	ASTM D5185m		4	12	3
Sulfur	ppm	ASTM D5185m		2280	2770	3359
CONTAMINANTS	8	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	16	23	23
Sodium	ppm	ASTM D5185m		0	4	4
Potassium	ppm	ASTM D5185m		0	2	3
Water	%	ASTM D6304	>0.2	<b>1.01</b>	<b>1.31</b>	0.007
ppm Water	ppm	ASTM D6304	>2000	<b>10100</b>	<b>1</b> 3100	70.9
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000			▲ 150836
Particles >6µm		ASTM D7647	>5000			<u>▲</u> 42164
Particles >14µm		ASTM D7647	>640			<b>△</b> 319
Particles >21µm		ASTM D7647	>160			37
Particles >38µm		ASTM D7647	>40			1
Particles >71µm		ASTM D7647	>10			1
Oil Cleanliness		ISO 4406 (c)	>21/19/16			<b>2</b> 4/23/15
FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2

Acid Number (AN)

mg KOH/g ASTM D8045

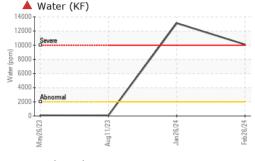
0.92

0.99

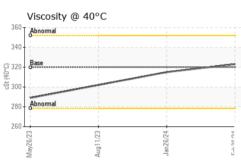
0.90



# **OIL ANALYSIS REPORT**



ber		
1/23 -	6/24	Feb26/24 -
Augl	Jan2	Feb2
	ber 	



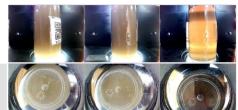
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES		metnoa	ilmit/base	current	nistory i	nistory2	
Visc @ 40°C	cSt	ASTM D445	320	323	315	302	

AMPLE IMAGES	method
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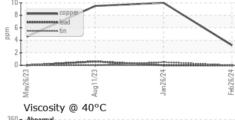
Color

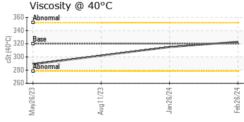
**Bottom** 

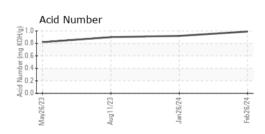


#### **GRAPHS**

Ferrous Alloys Non-ferrous Metals











Certificate L2367

Laboratory Sample No. Lab Number : 06101601 Unique Number : 10899831

: WC0776355

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

**Tested** Diagnosed 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)

: 27 Feb 2024

: 29 Feb 2024

: 29 Feb 2024 - Don Baldridge

T:

F: