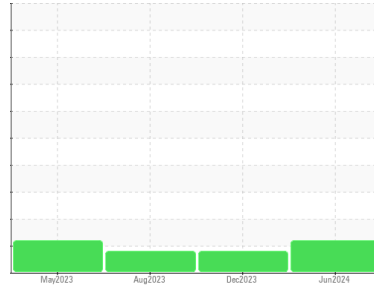




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

Paper Machine

Machine Id

Vacuum Pump #9 Gearbox

Component

Gearbox

Fluid

MOBIL MOBILGEAR SHC 220 (35 GAL)

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) 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		<b>WC0776426</b>	WC0776493	WC0776540
Sample Date	Client Info		<b>06 Jun 2024</b>	27 Dec 2023	11 Aug 2023
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>17</b>	22	25
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
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>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>3</b>	0	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	3
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185m		<b>465</b>	402	474
Zinc	ppm	ASTM D5185m		<b>11</b>	<1	0
Sulfur	ppm	ASTM D5185m		<b>2787</b>	2122	2720

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>18</b>	15	16
Sodium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Water	%	ASTM D6304	>0.2	<b>0.042</b>	0.013	0.010
ppm Water	ppm	ASTM D6304	>2000	<b>420</b>	133	102.1

## FLUID CLEANLINESS

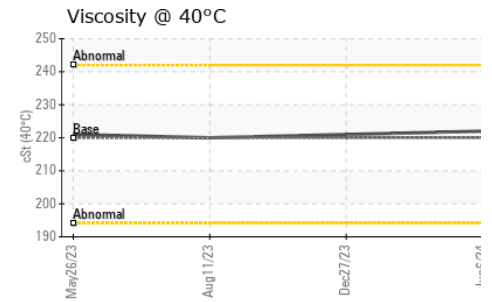
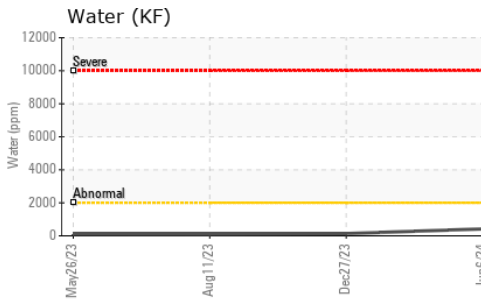
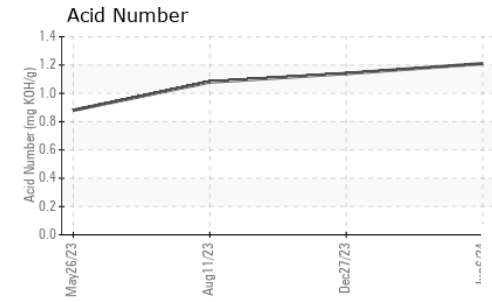
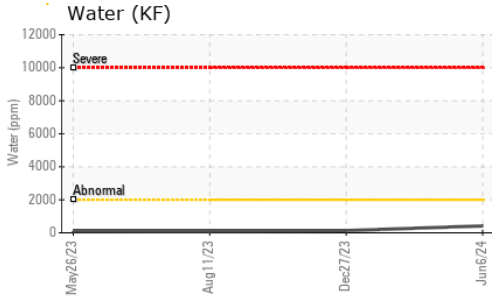
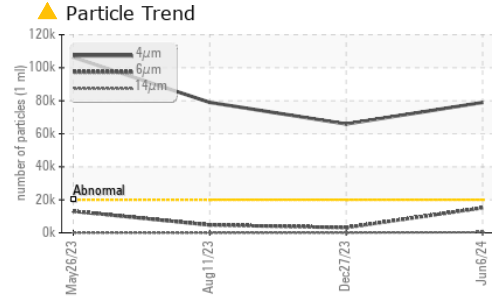
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 78955</b>	▲ 65925	▲ 78984
Particles >6µm	ASTM D7647	>5000	<b>▲ 15127</b>	3146	4741
Particles >14µm	ASTM D7647	>640	<b>369</b>	81	29
Particles >21µm	ASTM D7647	>160	<b>48</b>	19	7
Particles >38µm	ASTM D7647	>40	<b>3</b>	0	0
Particles >71µm	ASTM D7647	>10	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/21/16</b>	▲ 23/19/14	▲ 23/19/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.21</b>	1.14	1.08



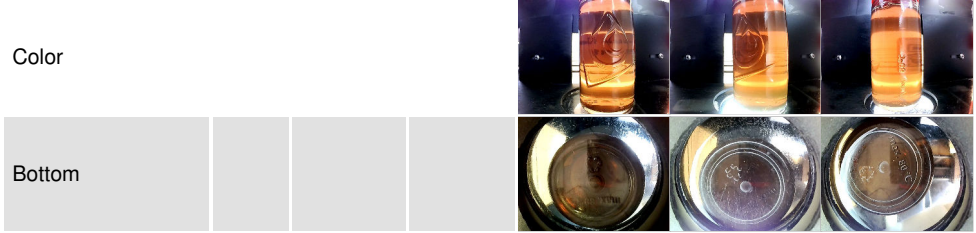
# OIL ANALYSIS REPORT



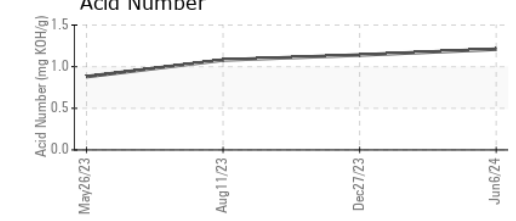
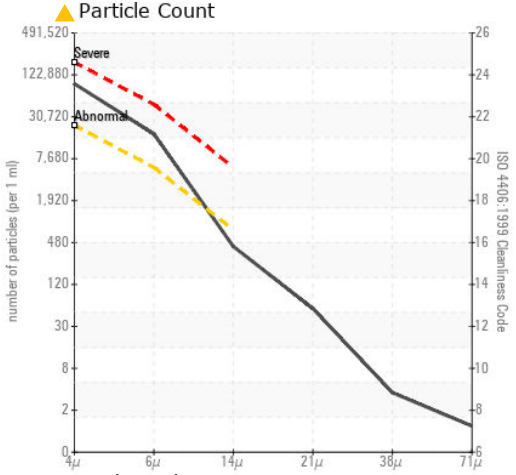
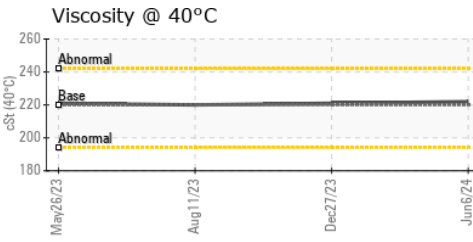
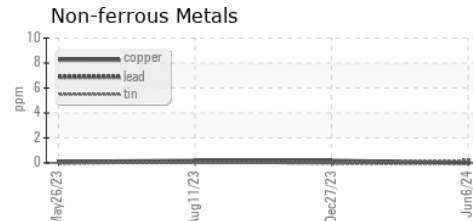
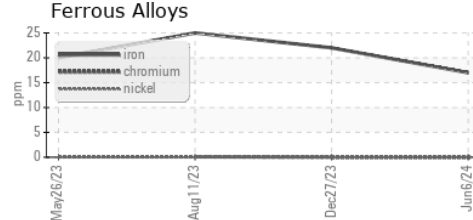
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	222	221

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0776426  
**Lab Number** : 06204642  
**Unique Number** : 11072103  
**Test Package** : PLANT  
**Received** : 10 Jun 2024  
**Tested** : 12 Jun 2024  
**Diagnosed** : 12 Jun 2024 - Doug Bogart

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)