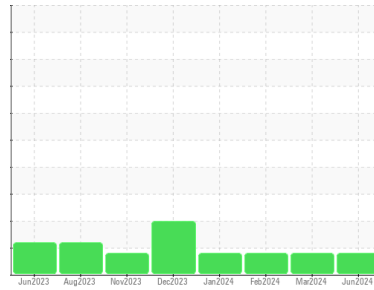




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**Paper Machine**

Machine Id

**Wet End Lubrication System**

Component

**Bearing Lube**

Fluid

**MOBIL DTE PM 220 (2000 GAL)**

## DIAGNOSIS

### ▲ Recommendation

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

### ▲ Wear

The copper level is abnormal. All other component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>WC0776477</b>	WC0776350	WC0776638
Sample Date	Client Info		<b>05 Jun 2024</b>	25 Mar 2024	26 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>MARGINAL</b>	MARGINAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>11</b>	10	3
Chromium	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >4	<b>0</b>	1	0
Lead	ppm	ASTM D5185m >30	<b>0</b>	2	0
Copper	ppm	ASTM D5185m >17	<b>▲ 26</b>	<b>▲ 39</b>	<b>▲ 37</b>
Tin	ppm	ASTM D5185m >10	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	3	0
Barium	ppm	ASTM D5185m	<b>13</b>	2	2
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	<b>3</b>	7	7
Calcium	ppm	ASTM D5185m	<b>125</b>	232	116
Phosphorus	ppm	ASTM D5185m	<b>518</b>	741	549
Zinc	ppm	ASTM D5185m	<b>624</b>	847	744
Sulfur	ppm	ASTM D5185m	<b>12092</b>	12806	10083

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	1
Sodium	ppm	ASTM D5185m	<b>36</b>	26	21
Potassium	ppm	ASTM D5185m >20	<b>3</b>	5	0
Water	%	ASTM D6304 >0.2	<b>0.035</b>	0.029	0.011
ppm Water	ppm	ASTM D6304 >2000	<b>353</b>	292	115

## FLUID CLEANLINESS

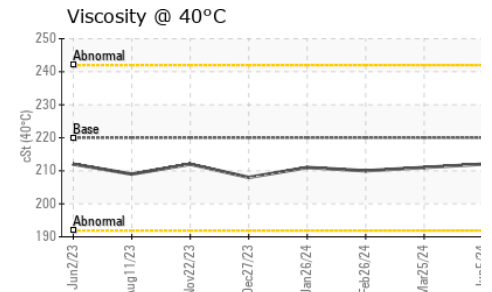
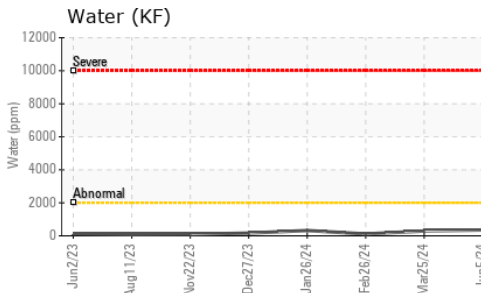
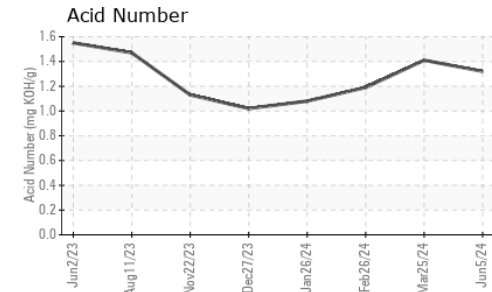
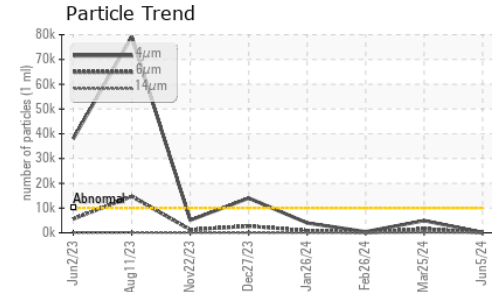
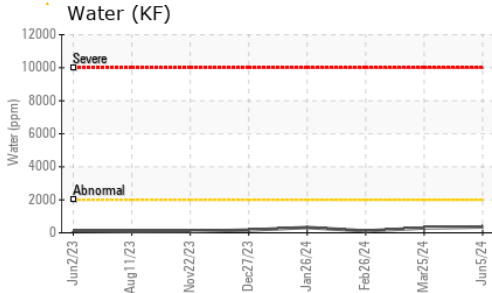
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>144</b>	4925	434
Particles >6µm	ASTM D7647	>2500	<b>58</b>	1615	122
Particles >14µm	ASTM D7647	>160	<b>7</b>	156	9
Particles >21µm	ASTM D7647	>40	<b>2</b>	49	2
Particles >38µm	ASTM D7647	>10	<b>0</b>	4	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>14/13/10</b>	19/18/14	16/14/10

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.32</b>	1.41	1.19



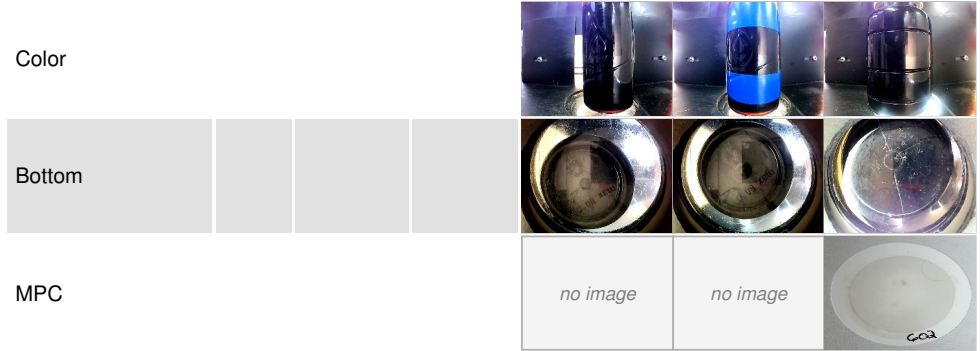
# OIL ANALYSIS REPORT



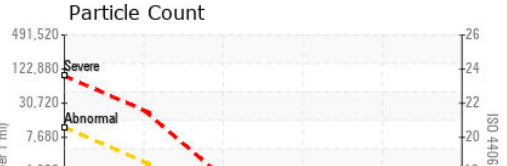
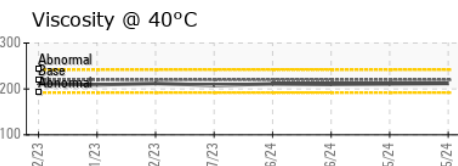
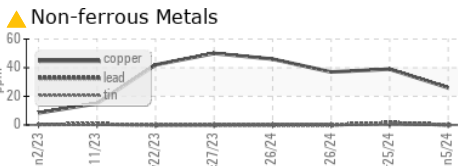
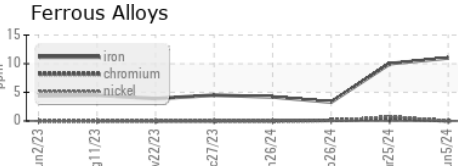
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	212	211

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0776477  
**Lab Number** : 06205381  
**Unique Number** : 11072842  
**Test Package** : PLANT  
**Received** : 10 Jun 2024  
**Tested** : 13 Jun 2024  
**Diagnosed** : 13 Jun 2024 - Don Baldrige

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)