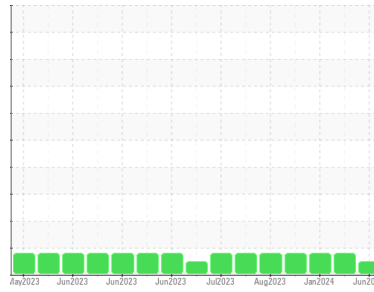




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Paper Machine**  
 Machine Id  
**Dry End Lubrication System**  
 Component  
**Bearing Lube**  
 Fluid  
**MOBIL DTE PM 220 (20000 LTR)**

## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**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>WC0776515</b>	WC0776349	WC0776504
Sample Date	Client Info		<b>05 Jun 2024</b>	25 Mar 2024	26 Jan 2024
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>31</b>	28	25
Chromium	ppm	ASTM D5185m >5	<b>0</b>	<1	0
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	<1
Lead	ppm	ASTM D5185m >30	<b>0</b>	1	0
Copper	ppm	ASTM D5185m >17	<b>13</b>	9	7
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>	0	0
Barium	ppm	ASTM D5185m	<b>2</b>	1	1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	4	4
Calcium	ppm	ASTM D5185m	<b>57</b>	92	79
Phosphorus	ppm	ASTM D5185m	<b>904</b>	944	893
Zinc	ppm	ASTM D5185m	<b>1109</b>	1141	1132
Sulfur	ppm	ASTM D5185m	<b>13703</b>	13621	11762

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	3	1
Sodium	ppm	ASTM D5185m	<b>9</b>	4	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	0
Water	%	ASTM D6304 >0.2	<b>0.006</b>	0.016	0.045
ppm Water	ppm	ASTM D6304 >2000	<b>63</b>	161	459

## FLUID CLEANLINESS

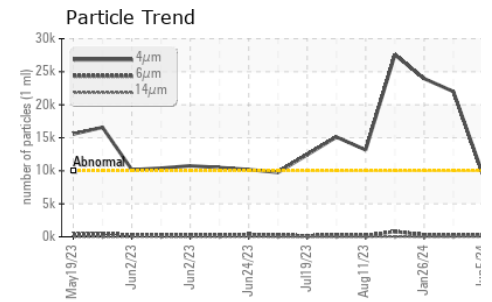
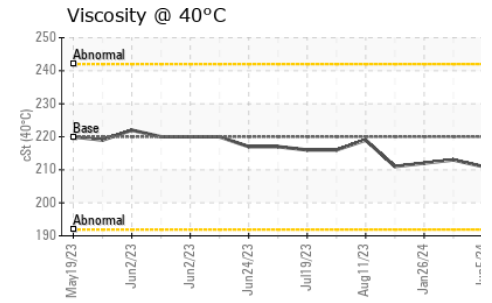
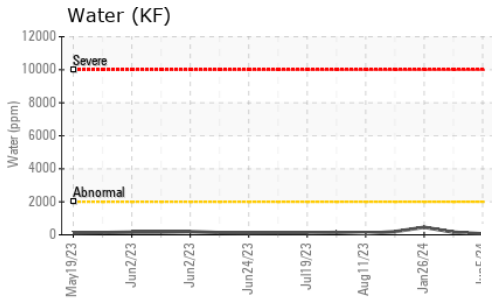
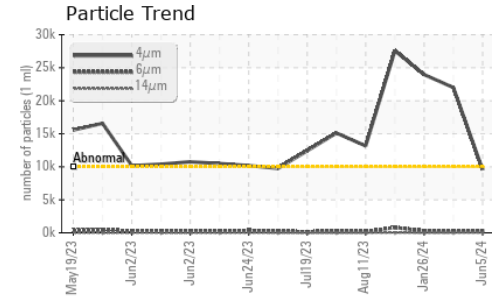
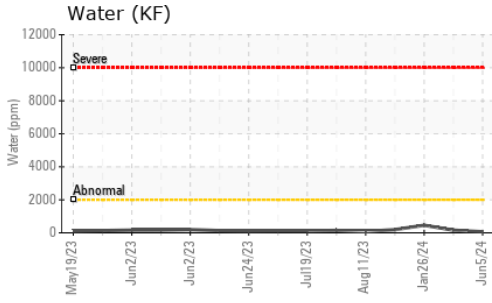
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>9559</b>	▲ 22000	▲ 23957
Particles >6µm	ASTM D7647	>2500	<b>307</b>	207	321
Particles >14µm	ASTM D7647	>160	<b>11</b>	8	15
Particles >21µm	ASTM D7647	>40	<b>2</b>	2	6
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>20/15/11</b>	▲ 22/15/10	▲ 22/16/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.52</b>	1.76	1.45



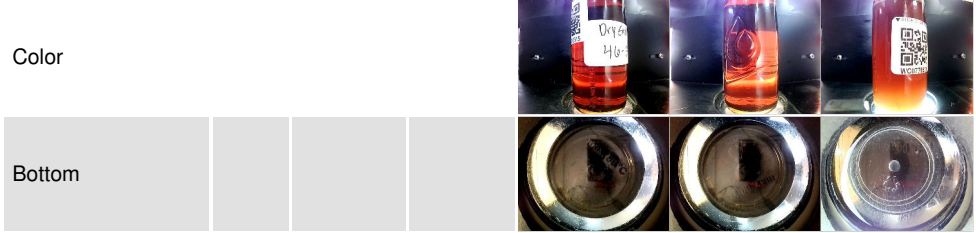
# OIL ANALYSIS REPORT



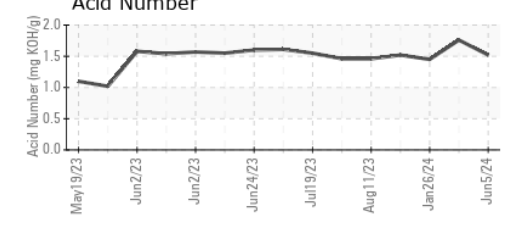
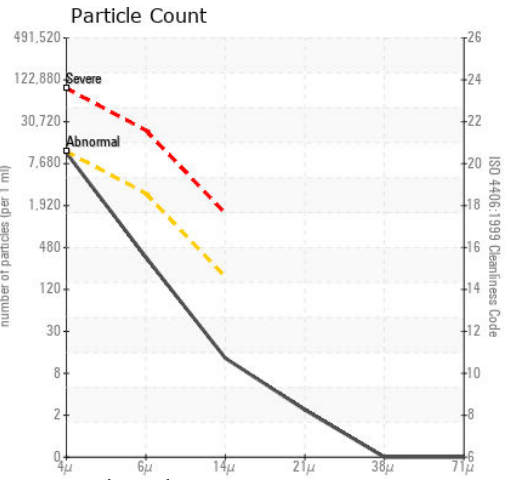
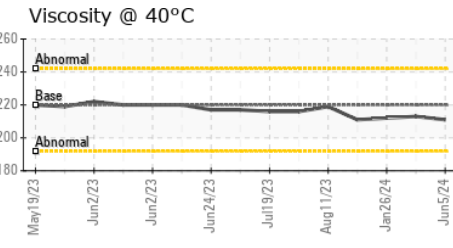
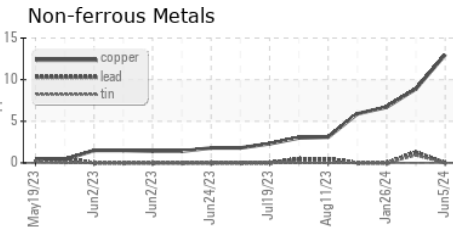
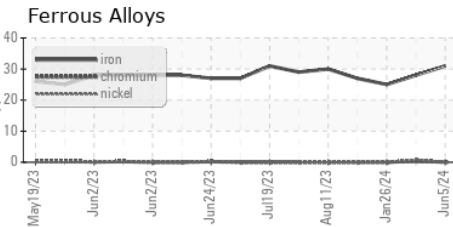
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	211	213	212

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0776515 **Received** : 10 Jun 2024  
**Lab Number** : 06205382 **Tested** : 13 Jun 2024  
**Unique Number** : 11072843 **Diagnosed** : 13 Jun 2024 - Don Baldrige  
**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)