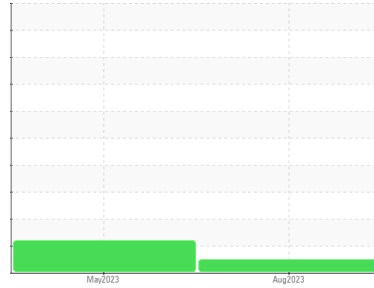




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Paper Machine
 Machine Id
Vacuum Pump #8 Gearbox
 Component
Gearbox
 Fluid
MOBIL MOBILGEAR SHC 220 (35 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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			WC0776541	WC0776636	---
Sample Date	Client Info			11 Aug 2023	26 May 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	14	11	---
Chromium	ppm	ASTM D5185m	>15	0	0	---
Nickel	ppm	ASTM D5185m	>15	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	0	---
Lead	ppm	ASTM D5185m	>100	<1	0	---
Copper	ppm	ASTM D5185m	>200	<1	<1	---
Tin	ppm	ASTM D5185m	>25	0	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	2	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		3	1	---
Calcium	ppm	ASTM D5185m		1	<1	---
Phosphorus	ppm	ASTM D5185m		465	464	---
Zinc	ppm	ASTM D5185m		0	0	---
Sulfur	ppm	ASTM D5185m		3463	3582	---

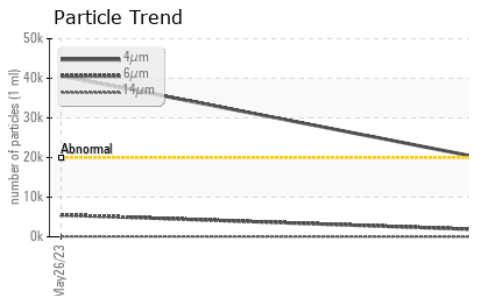
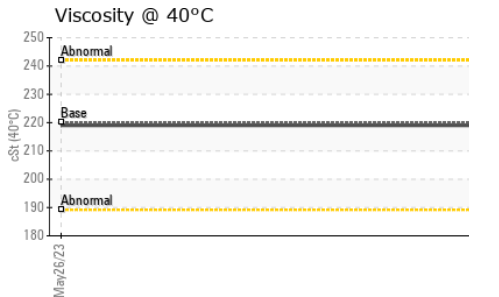
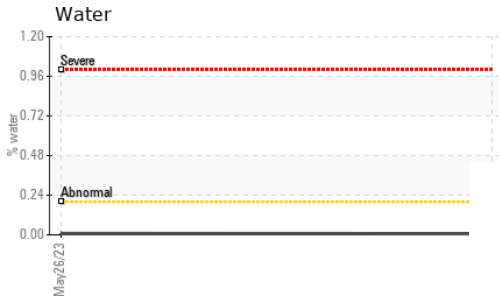
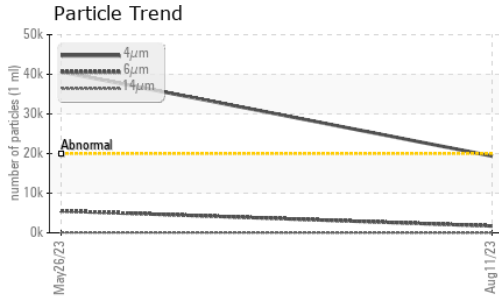
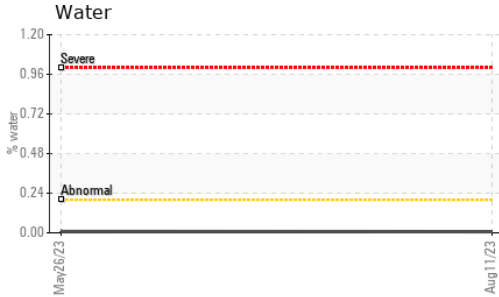
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	10	18	---
Sodium	ppm	ASTM D5185m		1	0	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Water	%	ASTM D6304	>0.2	0.007	0.008	---
ppm Water	ppm	ASTM D6304	>2000	79.8	84.1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	19369	▲ 40612	---
Particles >6µm		ASTM D7647	>5000	1722	▲ 5520	---
Particles >14µm		ASTM D7647	>640	34	97	---
Particles >21µm		ASTM D7647	>160	8	15	---
Particles >38µm		ASTM D7647	>40	0	1	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/18/12	▲ 23/20/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.95	0.95	---



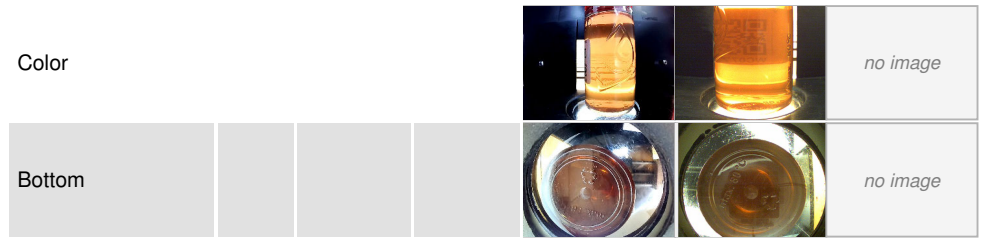
OIL ANALYSIS REPORT



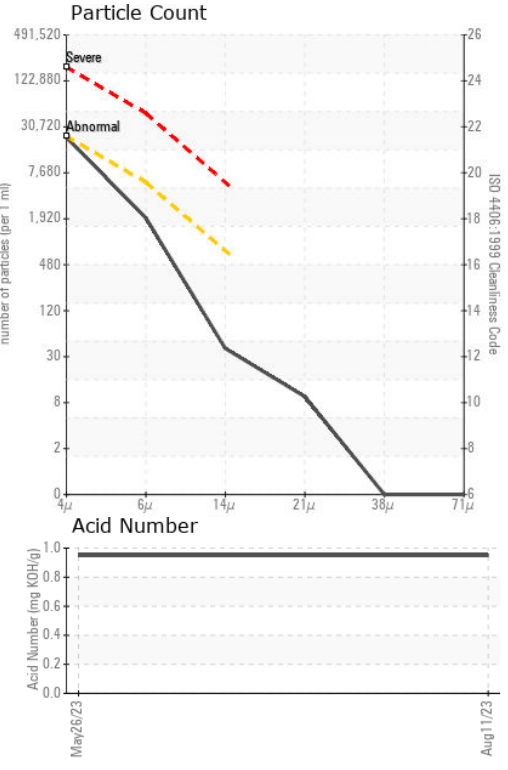
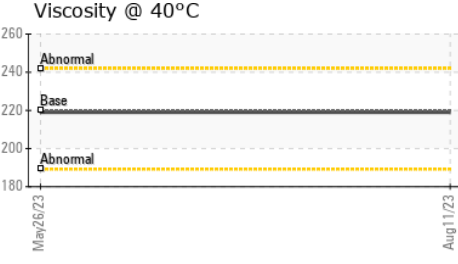
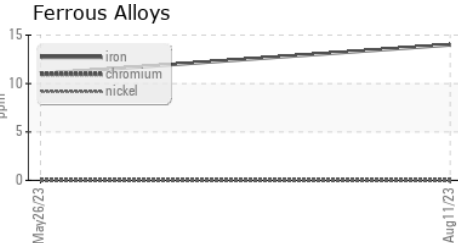
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	219	219	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776541 **Received** : 17 Aug 2023
Lab Number : 05927230 **Diagnosed** : 18 Aug 2023
Unique Number : 10607177 **Diagnostician** : 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
 T:
 F:

Certificate L2367
 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)