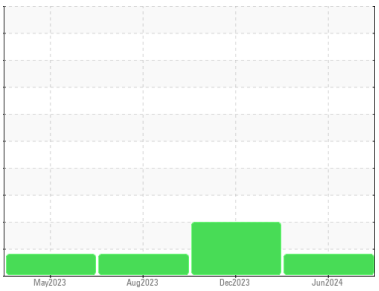
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Paper Machine
Machine Id
Vacuum Pump #4 Gearbox 46-245-008
Component
Gearbox
Fluid
MOBIL MOBILGEAR SHC 220 (55 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 moderate amount of silt (particulates < 6 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		**WC0776470**	WC0776608	WC0776538
Sample Date		Client Info		**06 Jun 2024**	27 Dec 2023	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				**ATTENTION**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**5**	18	18
Chromium	ppm	ASTM D5185m	>15	**0**	0	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	0	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	<1
Copper	ppm	ASTM D5185m	>200	**0**	0	<1
Tin	ppm	ASTM D5185m	>25	**0**	0	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		**6**	20	12
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	2
Calcium	ppm	ASTM D5185m		**<1**	2	0
Phosphorus	ppm	ASTM D5185m		**465**	424	470
Zinc	ppm	ASTM D5185m		**8**	1	<1
Sulfur	ppm	ASTM D5185m		**2646**	2833	3424

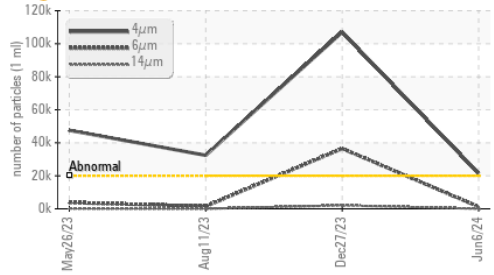
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**23**	36	28
Sodium	ppm	ASTM D5185m		**1**	0	1
Potassium	ppm	ASTM D5185m	>20	**2**	0	2
Water	%	ASTM D6304	>0.2	**0.051**	0.018	0.013
ppm Water	ppm	ASTM D6304	>2000	**510**	183	132.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**21424**	107036	32409
Particles >6µm		ASTM D7647	>5000	**1239**	36530	1507
Particles >14µm		ASTM D7647	>640	**56**	2073	30
Particles >21µm		ASTM D7647	>160	**17**	474	6
Particles >38µm		ASTM D7647	>40	**2**	10	0
Particles >71µm		ASTM D7647	>10	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**22/17/13**	24/22/18	22/18/12

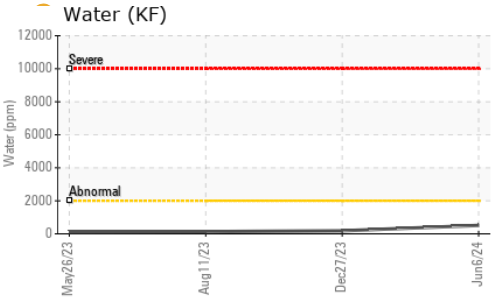
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.00**	1.18	1.10

OIL ANALYSIS REPORT

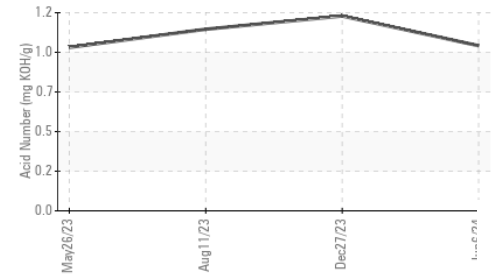
Particle Trend



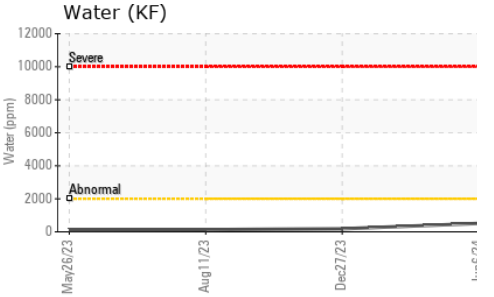
Water (KF)



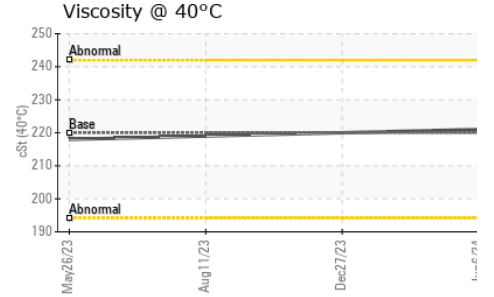
Acid Number



Water (KF)



Viscosity @ 40°C



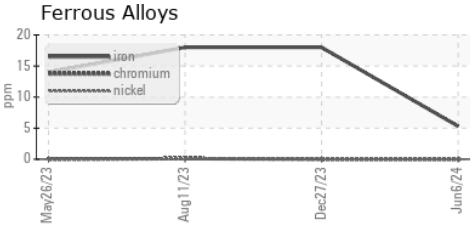
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**221**	220	219

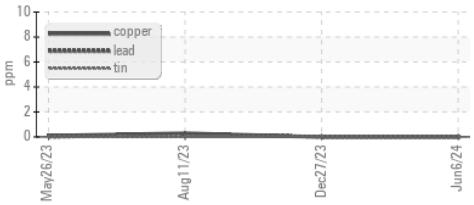
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

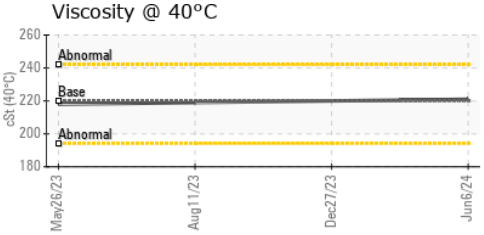
Ferrous Alloys



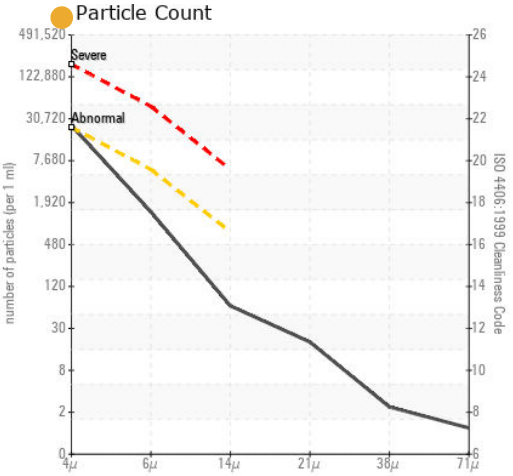
Non-ferrous Metals



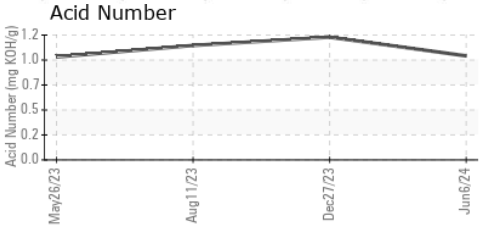
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776470
Lab Number : 06204641
Unique Number : 11072102
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
T:
F:

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)