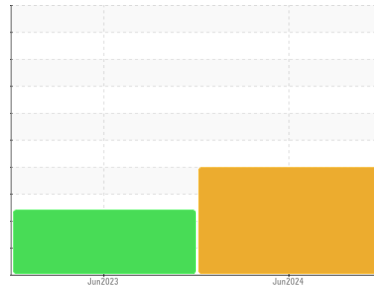




PROBLEM SUMMARY

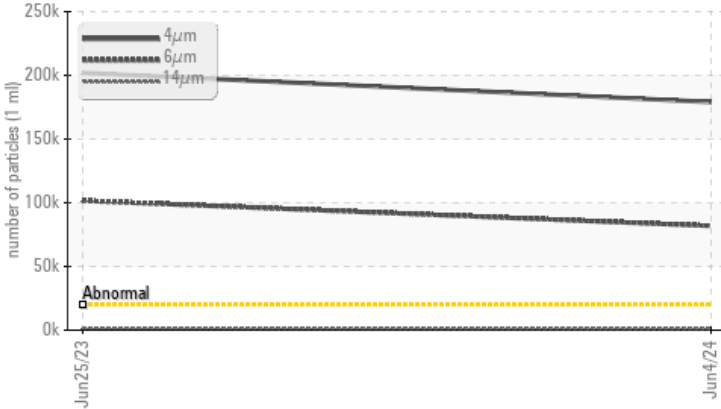
Area
 Machine ID
Recycled Fiber
 Component
LF Disc Filter Gearbox
 Fluid
MOBIL MOBILGEAR SHC 320 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	ABNORMAL	---
Particles >4µm	▲ 179052	▲ 201974	---
Particles >6µm	▲ 81829	▲ 101575	---
Oil Cleanliness	▲ 25/24/17	▲ 25/24/18	---

Customer Id: CASASH
 Sample No.: WC0776509
 Lab Number: 06200131
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

WEAR



25 Jun 2023 Diag: Doug Bogart

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Gear wear is indicated. There is a high amount of particulates present in the oil. The water content is negligible. The AN level is acceptable for this fluid.

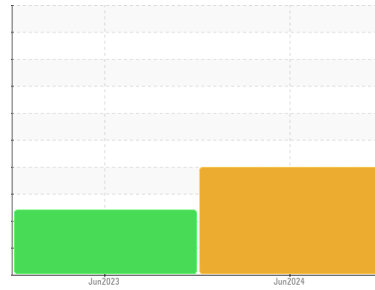
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

Recycled Fiber

Machine Id

LF Disc Filter Gearbox

Component

Gearbox

Fluid

MOBIL MOBILGEAR SHC 320 (--- GAL)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0776509	WC0776627	---
Sample Date	Client Info		04 Jun 2024	25 Jun 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			SEVERE	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	158	▲ 287	---
Chromium	ppm	ASTM D5185m >15	2	4	---
Nickel	ppm	ASTM D5185m >15	<1	3	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	0	<1	---
Lead	ppm	ASTM D5185m >100	0	0	---
Copper	ppm	ASTM D5185m >200	<1	<1	---
Tin	ppm	ASTM D5185m >25	<1	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	<1	0	---
Molybdenum	ppm	ASTM D5185m	<1	2	---
Manganese	ppm	ASTM D5185m	2	2	---
Magnesium	ppm	ASTM D5185m	<1	2	---
Calcium	ppm	ASTM D5185m	10	34	---
Phosphorus	ppm	ASTM D5185m	515	459	---
Zinc	ppm	ASTM D5185m	6	0	---
Sulfur	ppm	ASTM D5185m	2558	2881	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	17	22	---
Sodium	ppm	ASTM D5185m	1	2	---
Potassium	ppm	ASTM D5185m >20	4	7	---
Water	%	ASTM D6304 >0.2	0.009	0.003	---
ppm Water	ppm	ASTM D6304 >2000	97	38.0	---

FLUID CLEANLINESS

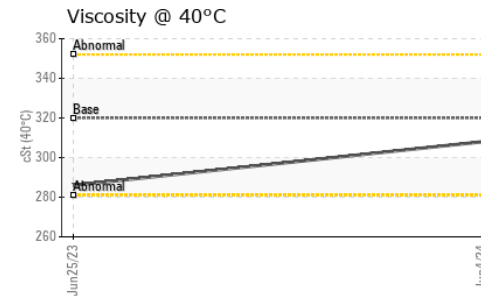
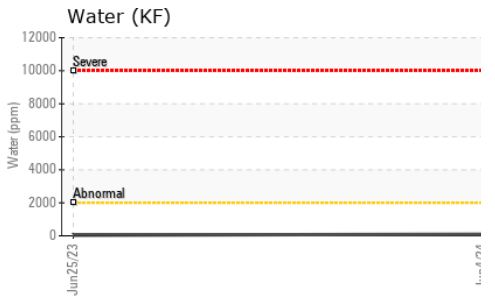
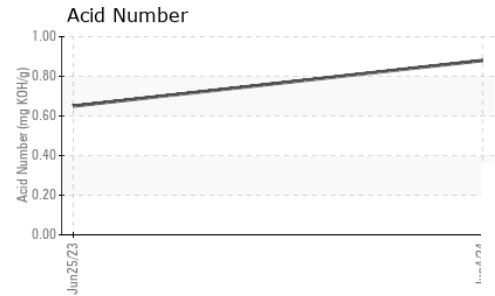
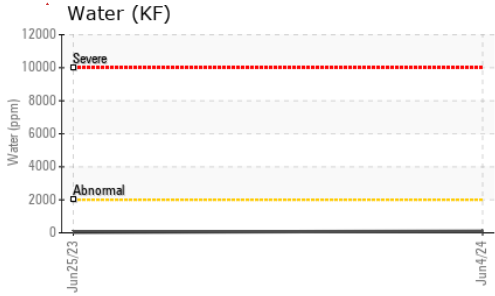
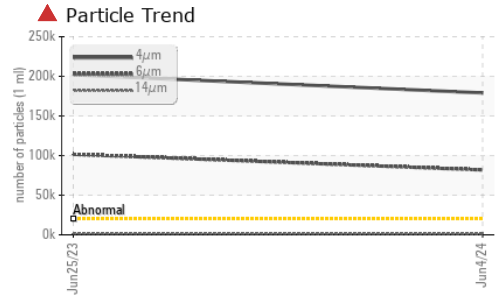
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 179052	▲ 201974	---
Particles >6µm	ASTM D7647	>5000	▲ 81829	▲ 101575	---
Particles >14µm	ASTM D7647	>640	● 1264	▲ 1618	---
Particles >21µm	ASTM D7647	>160	129	133	---
Particles >38µm	ASTM D7647	>40	6	0	---
Particles >71µm	ASTM D7647	>10	3	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 25/24/17	▲ 25/24/18	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.88	0.65	---



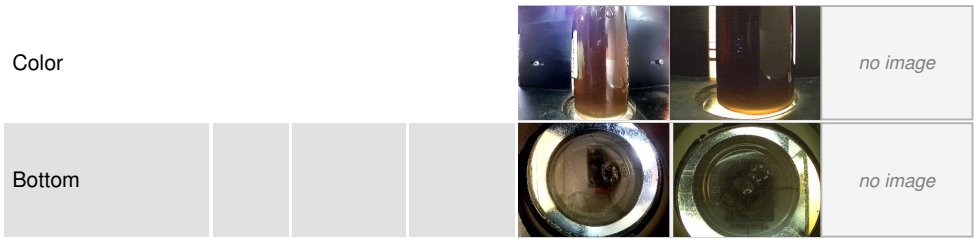
OIL ANALYSIS REPORT



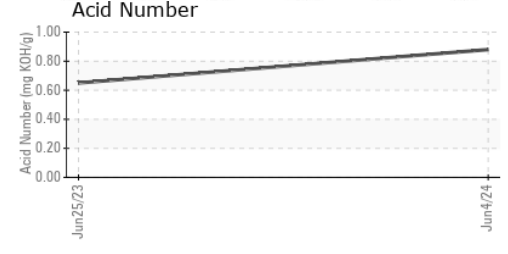
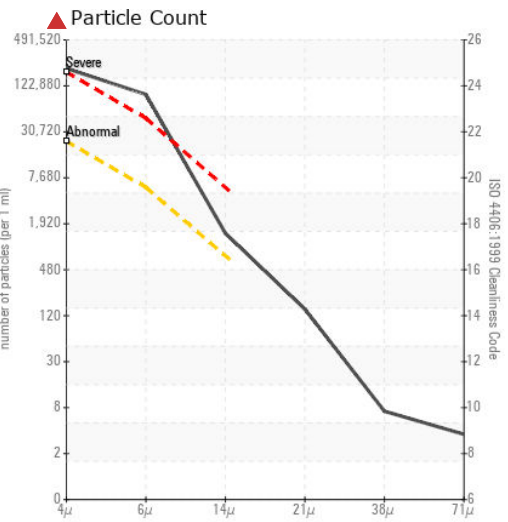
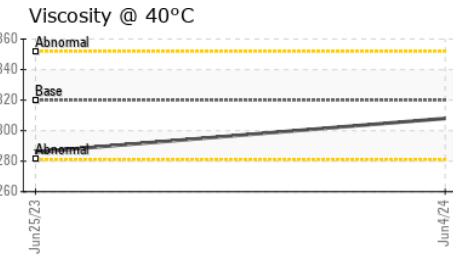
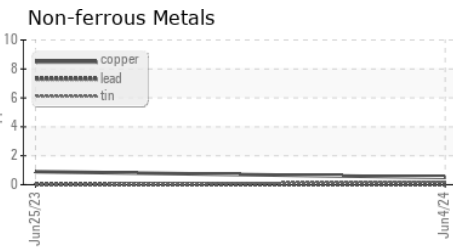
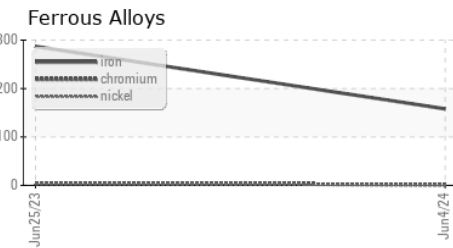
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	320	308	286

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776509 **Received** : 05 Jun 2024
Lab Number : 06200131 **Tested** : 06 Jun 2024
Unique Number : 11062254 **Diagnosed** : 06 Jun 2024 - Wes Davis
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)