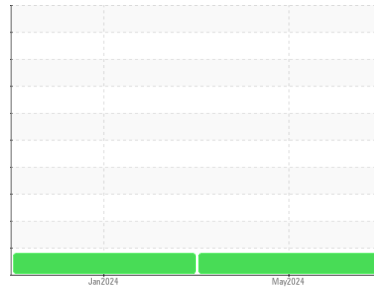




OIL ANALYSIS REPORT

Sample Rating Trend



INSOLUBLES



Area

Effluent Treatment Plant

Machine Id

Secondary Center Clarifier Bottom Gearbox 21-265-002.03

Component

Bottom Gearbox

Fluid

MOBIL SHC 636 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil. MPC (Membrane Patch Colorimetry) test indicates a moderate concentration of varnish present.

Fluid Condition

The AN level is acceptable for this fluid. Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0776652	WC0776371	---
Sample Date	Client Info		10 May 2024	26 Jan 2024	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	11	13	---
Chromium	ppm	ASTM D5185m	>15	<1	0	---
Nickel	ppm	ASTM D5185m	>15	0	0	---
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	2	---
Tin	ppm	ASTM D5185m	>25	0	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		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		0	<1	---
Calcium	ppm	ASTM D5185m		0	<1	---
Phosphorus	ppm	ASTM D5185m		431	414	---
Zinc	ppm	ASTM D5185m		0	0	---
Sulfur	ppm	ASTM D5185m		10	63	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	0	13	---
Sodium	ppm	ASTM D5185m		0	0	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water	%	ASTM D6304	>0.2	0.070	0.015	---
ppm Water	ppm	ASTM D6304	>2000	700	154	---

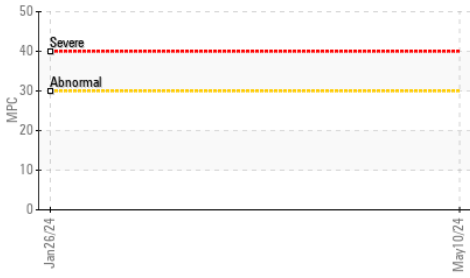
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		0.368	0.29	---
Anti-Oxidant 1	%	ASTM D6971	<25	101	---	---
Anti-Oxidant 2	%	ASTM D6971	<25	97	---	---
MPC Varnish Potential	Scale	ASTM D7843	>15	▲ 33	---	---

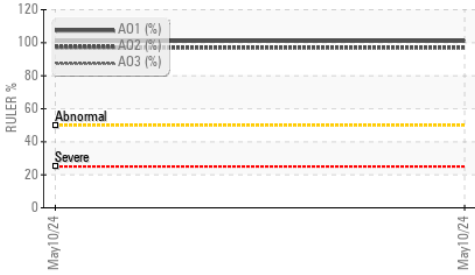


OIL ANALYSIS REPORT

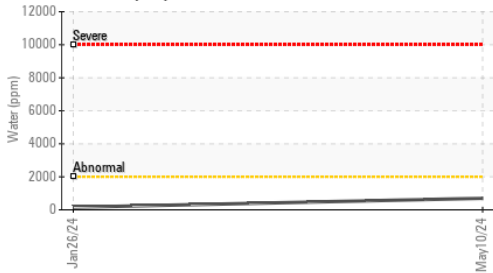
▲ Varnish Potential



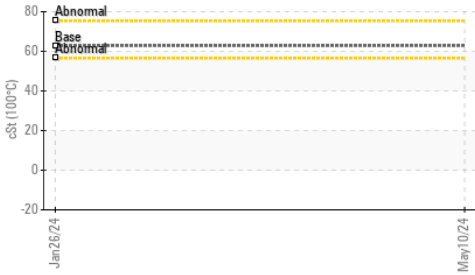
Remaining Life (RULER)



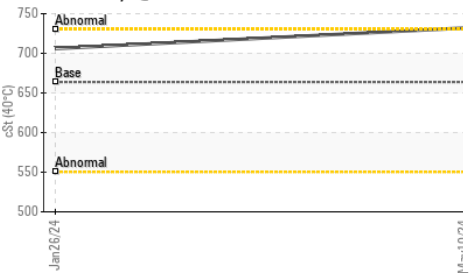
Water (KF)



Viscosity @ 100°C



Viscosity @ 40°C



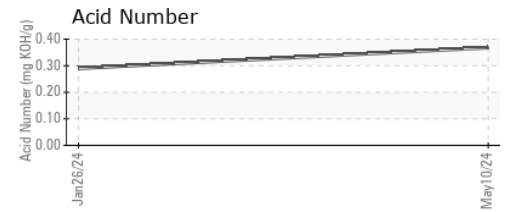
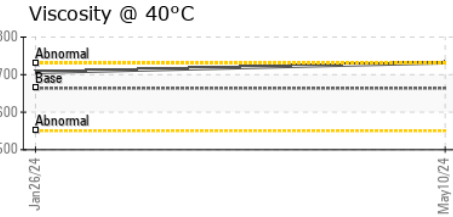
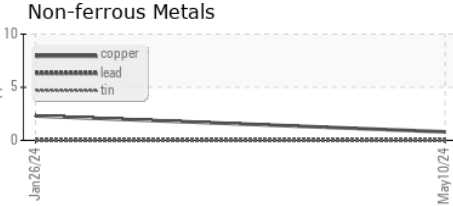
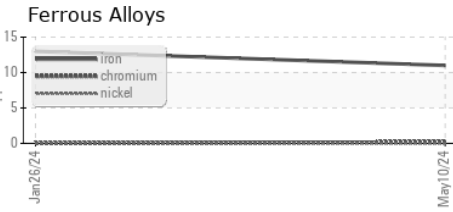
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	▲ MODER	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	663.8	732	706	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			no image
Bottom			no image
MPC		no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0776652

Lab Number : 06181423

Unique Number : 11032749

Test Package : AOM 1 (Additional Tests: KF)

Received : 16 May 2024

Tested : 17 Jun 2024

Diagnosed : 17 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

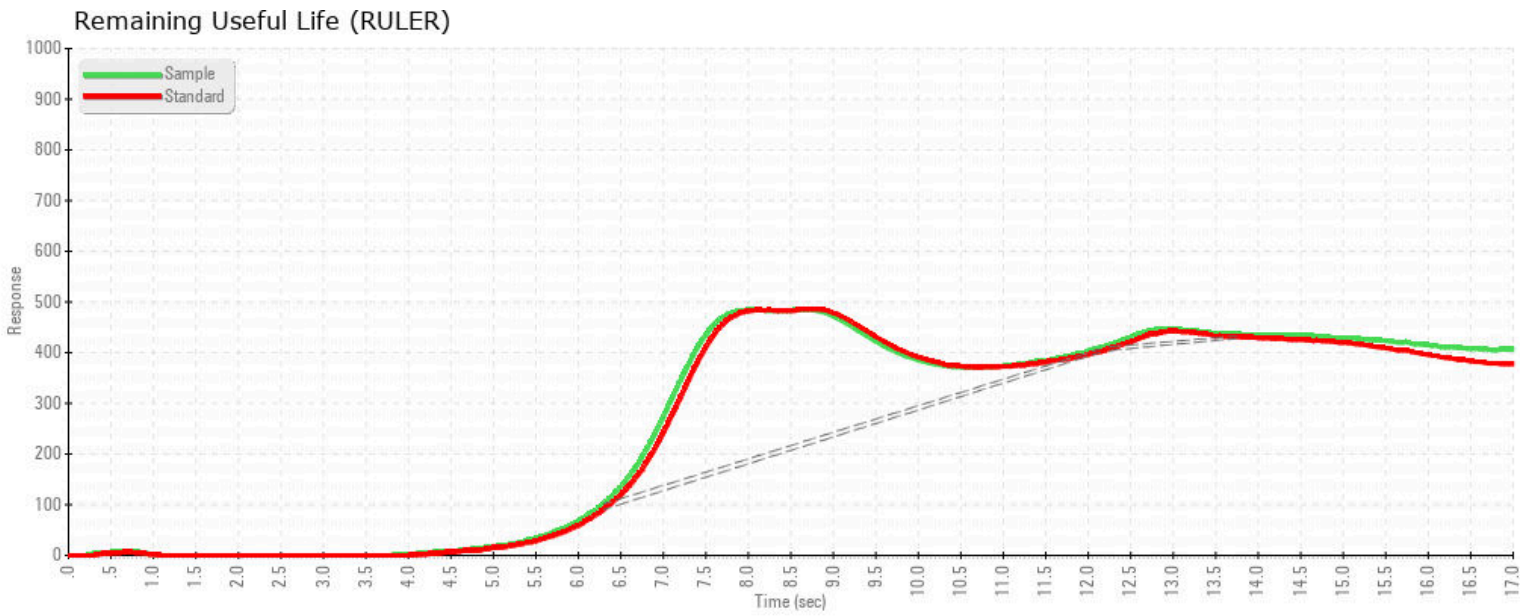
To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

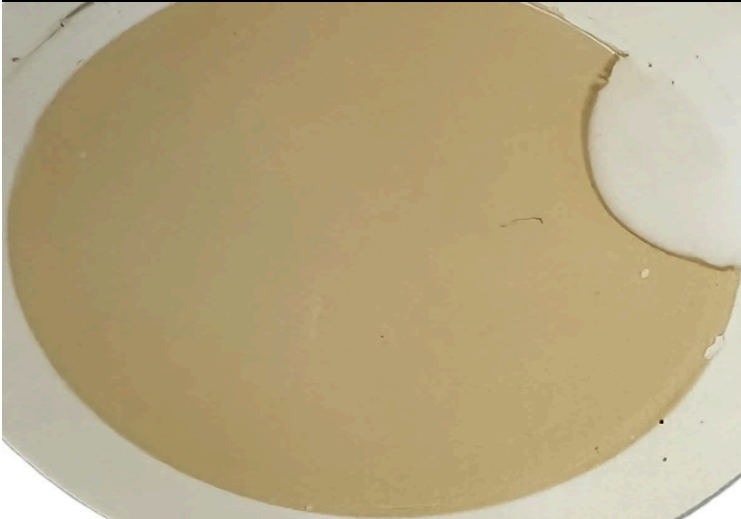
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:

F:



MPC (Varnish Test)



Sample Color & Clarity



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