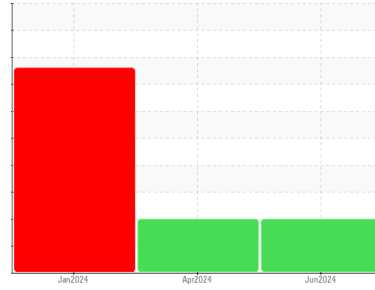




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

Effluent Treatment Plant

Machine Id

Secondary East Clarifier Bottom Gearbox 21-265-011.03

Component

Bottom Gearbox

Fluid

MOBIL SHC 636 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. 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 moderate 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		WC0776452	WC0776368	WC0776374
Sample Date	Client Info		04 Jun 2024	18 Apr 2024	26 Jan 2024
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			ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	19	10
Chromium	ppm	ASTM D5185m	>15	0	<1
Nickel	ppm	ASTM D5185m	>15	0	<1
Titanium	ppm	ASTM D5185m		0	<1
Silver	ppm	ASTM D5185m		0	0
Aluminum	ppm	ASTM D5185m	>25	0	2
Lead	ppm	ASTM D5185m	>100	0	<1
Copper	ppm	ASTM D5185m	>200	<1	<1
Tin	ppm	ASTM D5185m	>25	<1	<1
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0
Barium	ppm	ASTM D5185m		0	<1
Molybdenum	ppm	ASTM D5185m		0	<1
Manganese	ppm	ASTM D5185m		<1	<1
Magnesium	ppm	ASTM D5185m		0	<1
Calcium	ppm	ASTM D5185m		1	0
Phosphorus	ppm	ASTM D5185m		480	424
Zinc	ppm	ASTM D5185m		0	0
Sulfur	ppm	ASTM D5185m		18	173

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	17	18
Sodium	ppm	ASTM D5185m		0	0
Potassium	ppm	ASTM D5185m	>20	1	1
Water	%	ASTM D6304	>0.2	0.005	0.004
ppm Water	ppm	ASTM D6304	>2000	55	46

FLUID CLEANLINESS

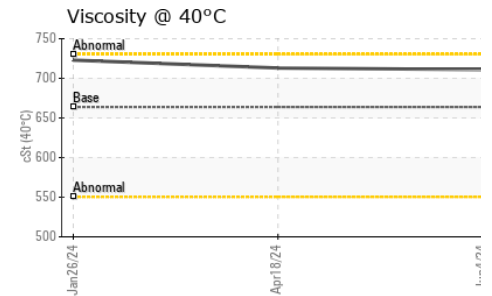
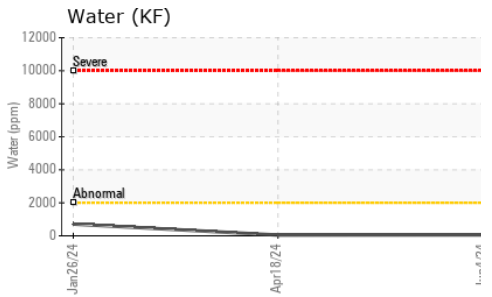
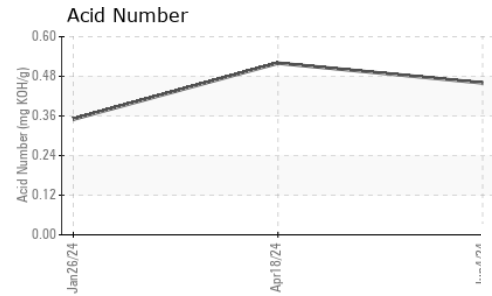
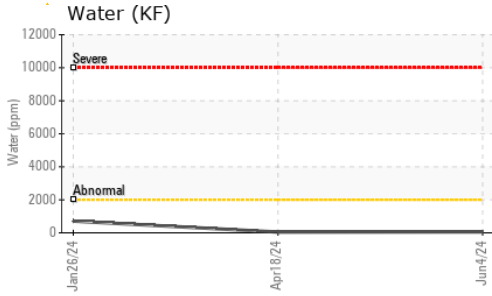
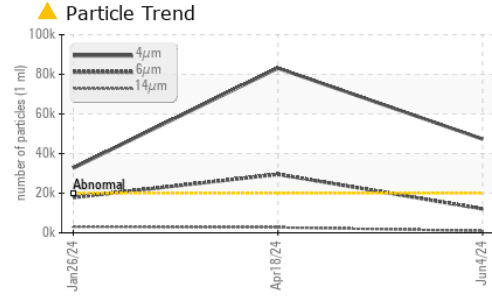
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 47312	▲ 83081	▲ 32676
Particles >6µm	ASTM D7647	>5000	▲ 12050	▲ 29526	▲ 17800
Particles >14µm	ASTM D7647	>640	● 931	▲ 2723	▲ 3029
Particles >21µm	ASTM D7647	>160	● 251	▲ 774	▲ 1020
Particles >38µm	ASTM D7647	>40	8	33	▲ 158
Particles >71µm	ASTM D7647	>10	1	2	▲ 16
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/21/17	▲ 24/22/19	▲ 22/21/19

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.46	0.52



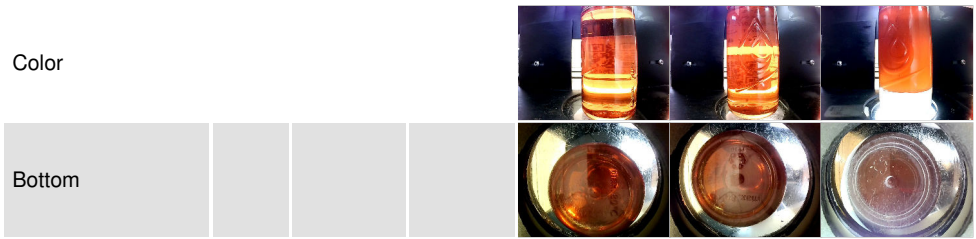
OIL ANALYSIS REPORT



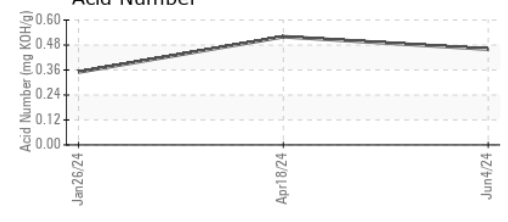
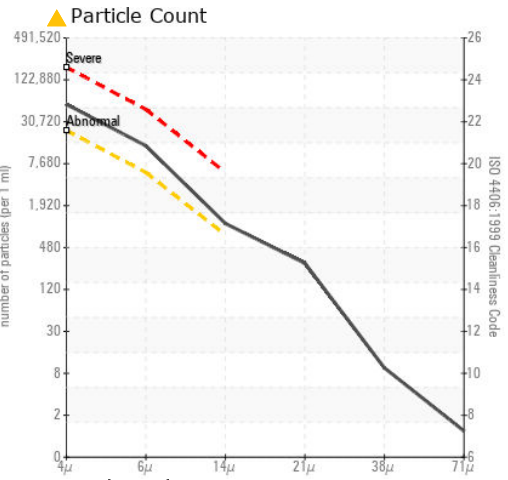
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%
Free Water	scalar	*Visual	NEG	NEG	>10%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	663.8	711	713

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776452
Lab Number : 06200134
Unique Number : 11062257
Test Package : PLANT
Received : 05 Jun 2024
Tested : 06 Jun 2024
Diagnosed : 06 Jun 2024 - Wes Davis

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)