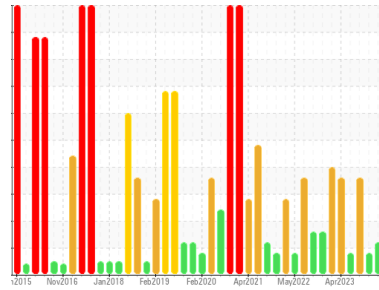




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
FIBER
 Machine Id
FIBER BROKE CENTER PULPER 3
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- 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 < 14 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	RP0037930	RP0030314	RP0030548
Sample Date	Client Info	05 Jun 2024	13 Mar 2024	27 Dec 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	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	
PQ	ASTM D8184	20	13	---	
Iron	ppm	ASTM D5185m >200	8	4	20
Chromium	ppm	ASTM D5185m >15	<1	<1	<1
Nickel	ppm	ASTM D5185m >15	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >25	2	0	2
Lead	ppm	ASTM D5185m >100	0	1	0
Copper	ppm	ASTM D5185m >200	<1	0	0
Tin	ppm	ASTM D5185m >25	<1	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	27	26	33
Barium	ppm	ASTM D5185m 15	<1	0	0
Molybdenum	ppm	ASTM D5185m 15	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 50	<1	0	<1
Calcium	ppm	ASTM D5185m 50	<1	0	2
Phosphorus	ppm	ASTM D5185m 350	399	405	428
Zinc	ppm	ASTM D5185m 100	5	0	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	10	5	<1
Sodium	ppm	ASTM D5185m	0	1	0
Potassium	ppm	ASTM D5185m >20	<1	1	1
Water	%	ASTM D6304 >0.2	0.014	0.009	0.014
ppm Water	ppm	ASTM D6304 >2000	146	98	146

FLUID CLEANLINESS

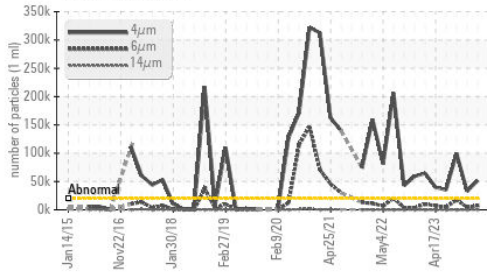
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ 51629	▲ 32657	▲ 99652
Particles >6µm	ASTM D7647 >5000	● 7447	4539	▲ 17591
Particles >14µm	ASTM D7647 >640	69	109	161
Particles >21µm	ASTM D7647 >160	9	20	18
Particles >38µm	ASTM D7647 >40	0	2	0
Particles >71µm	ASTM D7647 >10	0	1	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 23/20/13	▲ 22/19/14	▲ 24/21/15

FLUID DEGRADATION

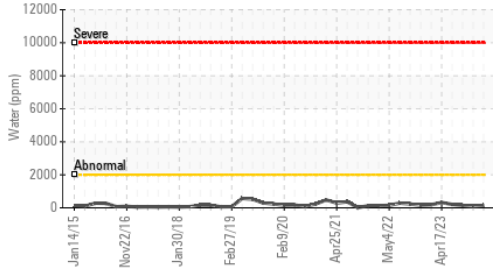
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	1.01	1.01	1.42

OIL ANALYSIS REPORT

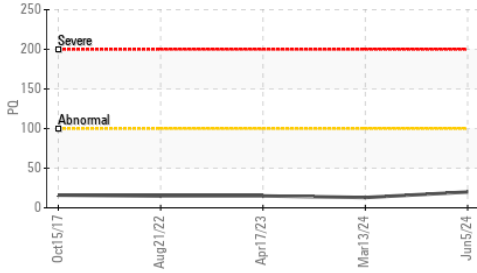
▲ Particle Trend



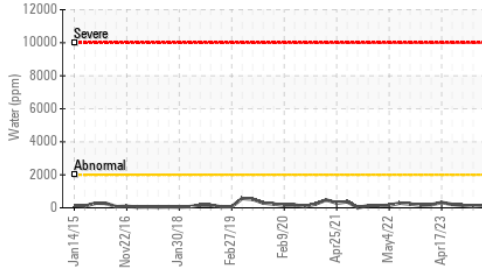
Water (KF)



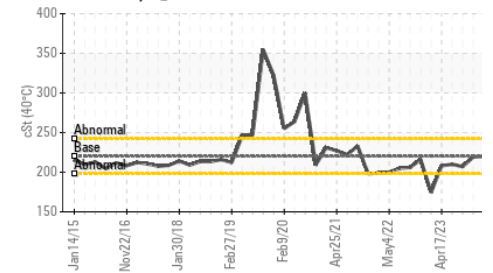
PQ



Water (KF)



Viscosity @ 40°C



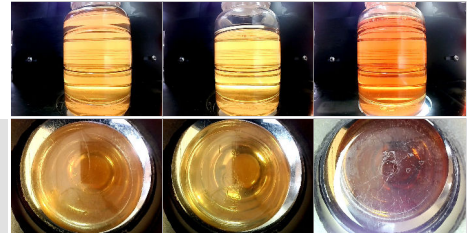
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	219	207

SAMPLE IMAGES	method	limit/base	current	history1	history2
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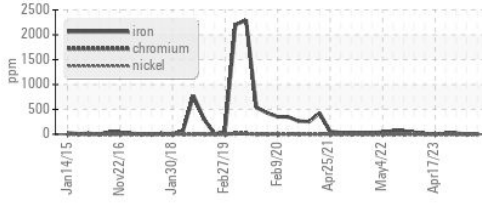
Color

Bottom

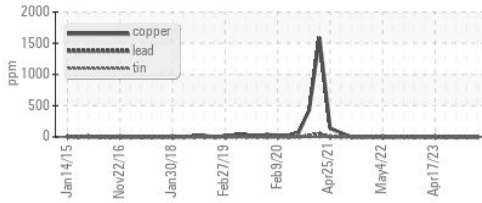


GRAPHS

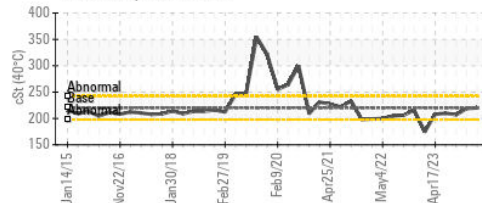
Ferrous Alloys



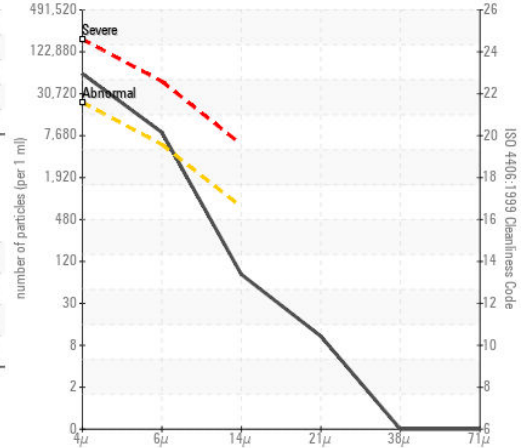
Non-ferrous Metals



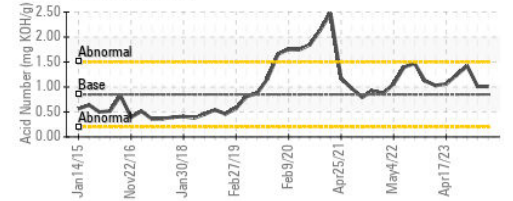
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

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

Sample No. : RP0037930

Lab Number : 06201510

Unique Number : 11063633

Test Package : IND 2 (Additional Tests: PQ, PrtCount)

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)

Received : 06 Jun 2024

Tested : 07 Jun 2024

Diagnosed : 09 Jun 2024 - Don Baldrige

Kimberly-Clark - Mobile - Fiber - BC UNITS

200 BAYBRIDGE RD

MOBILE, AL

US 36610

Contact: CASEY DONOVAN

casey.s.donovan@kcc.com

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