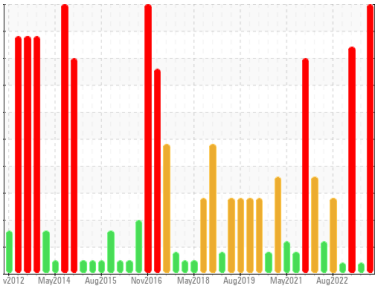
PROBLEM SUMMARY

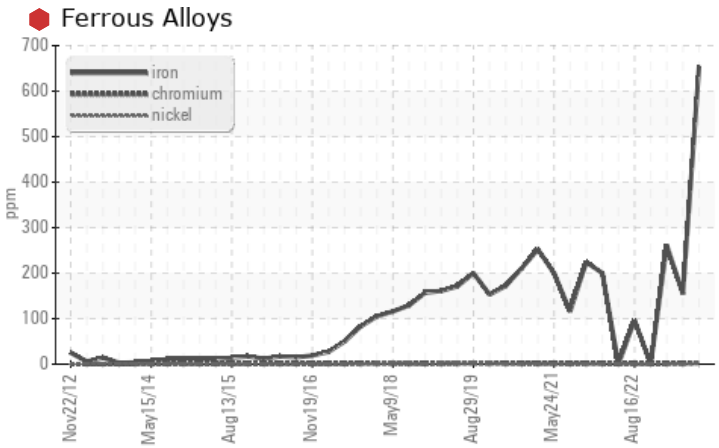
Sample Rating Trend

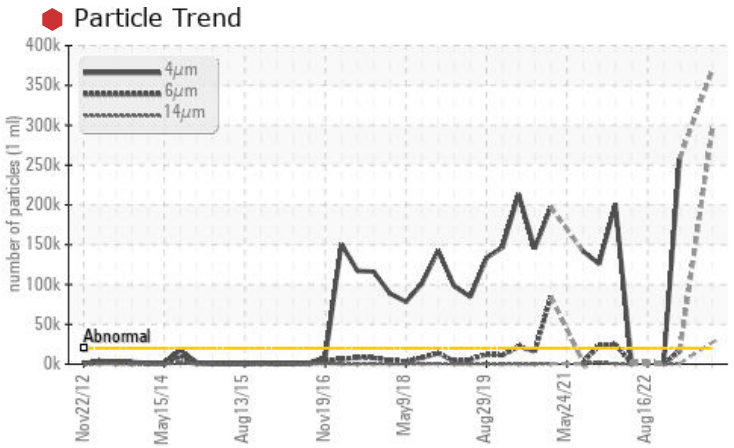


WEAR

Area
TM 6
Machine Id
1ST PRESSURE ROLL GRBX
Component
Gearbox
Fluid
GEAR OIL ISO 220 (36 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>200	**654**	155	261
Particles >4µm		ASTM D7647	>20000	**368465**	---	258296
Particles >6µm		ASTM D7647	>5000	**292100**	---	16129
Particles >14µm		ASTM D7647	>640	**26820**	---	773
Particles >21µm		ASTM D7647	>160	**888**	---	176
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**26/25/22**	---	25/21/17
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	NEG	NEG

Customer Id: KIMMOBTM6
Sample No.: RP0034433
Lab Number: 05932858
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

24 May 2023 Diag: Don Baldridge

VIS DEBRIS

We recommend you service the filters on this component if applicable. 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.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

21 Feb 2023 Diag: Don Baldridge

ISO

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.Gear wear is indicated. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

06 Nov 2022 Diag: Angela Borella

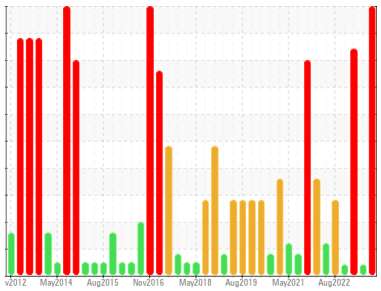
VISCOSITY

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 68 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
TM 6
Machine Id
1ST PRESSURE ROLL GRBX
Component
Gearbox
Fluid
GEAR OIL ISO 220 (36 GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated.

Contamination
There is a high amount of particulates 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		**RP0034433**	RP0023574	RP0030374
Sample Date		Client Info		**09 Aug 2023**	24 May 2023	21 Feb 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				**SEVERE**	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**73**	25	19
Iron	ppm	ASTM D5185m	>200	**654**	155	261
Chromium	ppm	ASTM D5185m	>15	**2**	<1	<1
Nickel	ppm	ASTM D5185m	>15	**4**	<1	1
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**5**	3	3
Lead	ppm	ASTM D5185m	>100	**<1**	0	0
Copper	ppm	ASTM D5185m	>200	**8**	<1	0
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**22**	22	25
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	**<1**	<1	0
Manganese	ppm	ASTM D5185m		**4**	1	2
Magnesium	ppm	ASTM D5185m	50	**1**	<1	8
Calcium	ppm	ASTM D5185m	50	**40**	5	9
Phosphorus	ppm	ASTM D5185m	350	**532**	333	321
Zinc	ppm	ASTM D5185m	100	**446**	161	229

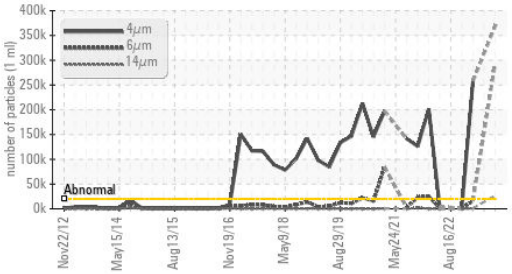
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**13**	3	7
Sodium	ppm	ASTM D5185m		**10**	4	6
Potassium	ppm	ASTM D5185m	>20	**1**	<1	1
Water	%	ASTM D6304	>0.2	**0.081**	0.015	0.021
ppm Water	ppm	ASTM D6304	>2000	**810**	155.5	211.1

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	**368465**	---	258296
Particles >6µm	ASTM D7647	>5000	**292100**	---	16129
Particles >14µm	ASTM D7647	>640	**26820**	---	773
Particles >21µm	ASTM D7647	>160	**888**	---	176
Particles >38µm	ASTM D7647	>40	**1**	---	5
Particles >71µm	ASTM D7647	>10	**0**	---	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	**26/25/22**	---	25/21/17

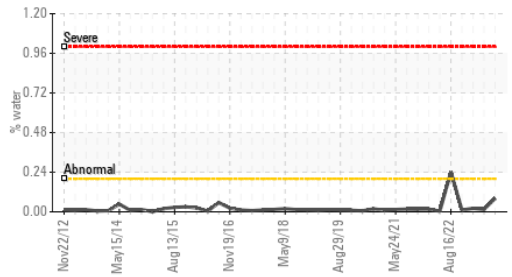
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**1.06**	1.46	1.37

OIL ANALYSIS REPORT

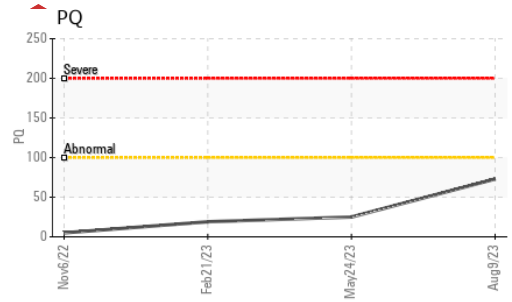
Particle Trend



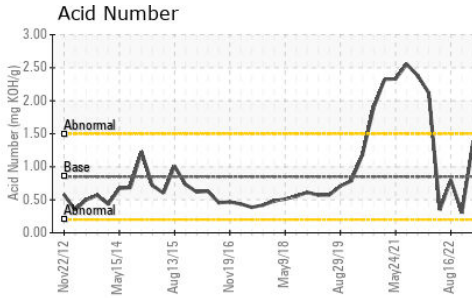
Water



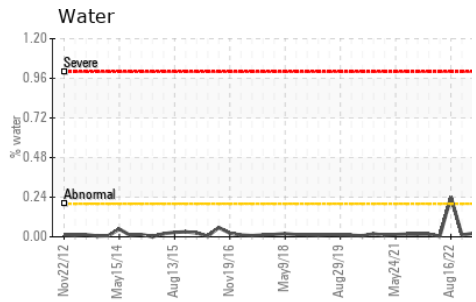
PQ



Acid Number

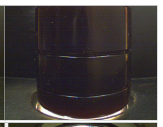
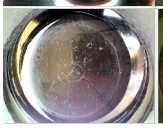
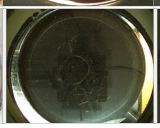
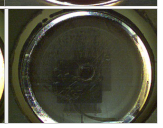


Water



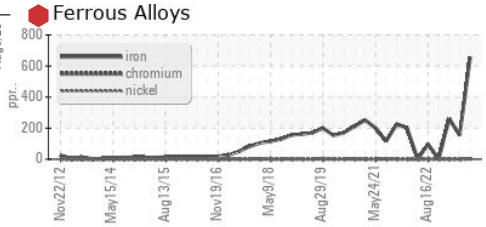
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	LIGHT
Sand/Dirt	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	▲ **0.2%**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**211**	209	213

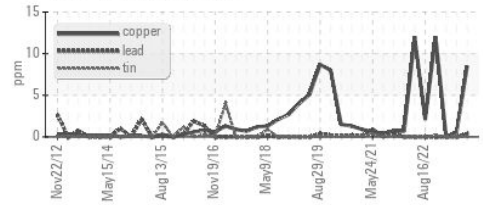
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

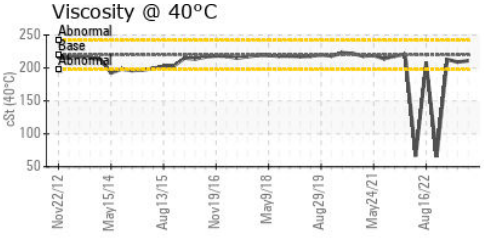
Ferrous Alloys



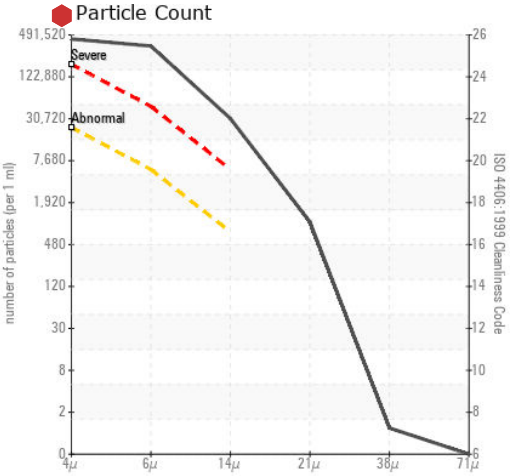
Non-ferrous Metals



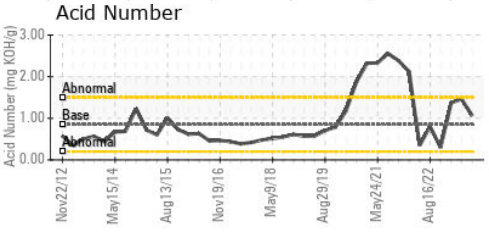
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034433 **Received** : 23 Aug 2023
Lab Number : 05932858 **Diagnosed** : 25 Aug 2023
Unique Number : 10618129 **Diagnostician** : Doug Bogart
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)

Kimberly-Clark - Mobile - TM 6
200 BAYBRIDGE RD
MOBILE, AL
US 36610
Contact: MORGAN RUSSELL
Morgan.Russell@kcc.com
T:
F: (251)452-6335