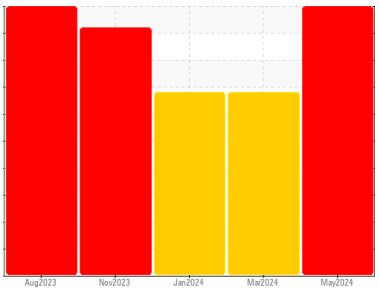
PROBLEM SUMMARY

Sample Rating Trend

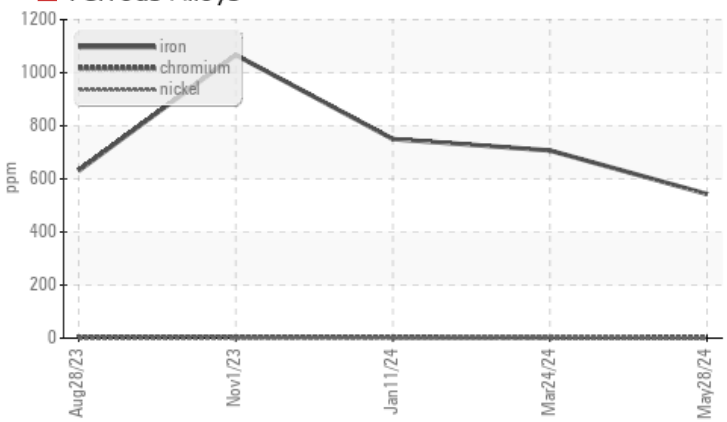


WEAR

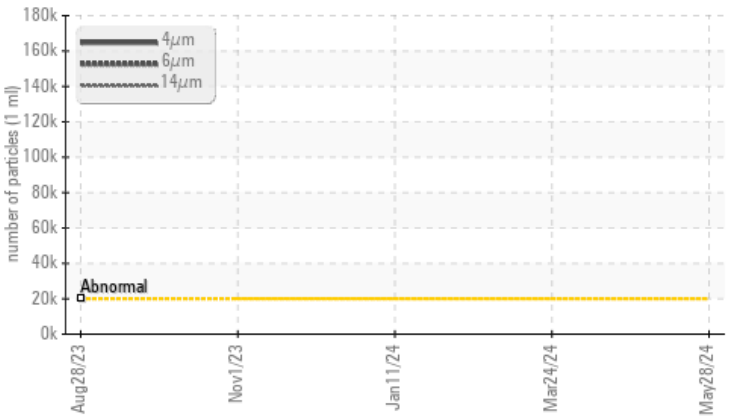
Area
TM 7
Machine Id
TM 7 BLEND CHEST AGITATOR
Component
Gearbox
Fluid
SHELL 220 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. 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**	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>200	▲ **543**	▲ 707	▲ 750
Particles >4µm		ASTM D7647	>20000	▲ **160814**	---	---
Particles >6µm		ASTM D7647	>5000	▲ **100634**	---	---
Particles >14µm		ASTM D7647	>640	▲ **2783**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/24/19**	---	---

Customer Id: KIMMOBTM7
Sample No.: RP0037946
Lab Number: 06205369
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@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 Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WEAR

24 Mar 2024 Diag: Jonathan Hester
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. We were unable to perform a particle count due to a high concentration of particles present in this sample.Gear wear is indicated. There is a moderate amount of visible silt present in the sample. The water content is negligible. The AN level is acceptable for this fluid.

view report

WEAR

11 Jan 2024 Diag: Jonathan Hester
We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.Gear wear is indicated. There is a high amount of visible silt present in the sample. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

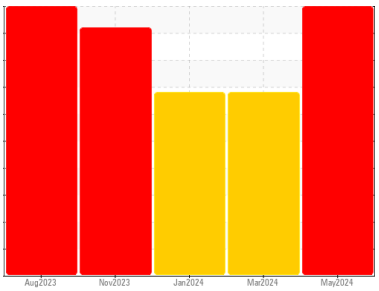
WEAR

01 Nov 2023 Diag: Jonathan Hester
We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.Gear wear is indicated. Appearance is unacceptable There is a moderate amount of visible silt present in the sample. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
TM 7
Machine Id
TM 7 BLEND CHEST AGITATOR
Component
Gearbox
Fluid
SHELL 220 (--- GAL)

DIAGNOSIS

▲ Recommendation
We recommend that you drain the oil and perform a filter service on this component if not already done. 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. The water content is negligible.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0037946**	RP0030307	RP0030323
Sample Date		Client Info		**28 May 2024**	24 Mar 2024	11 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				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**39**	79	104
Iron	ppm	ASTM D5185m	>200	▲ **543**	▲ 707	▲ 750
Chromium	ppm	ASTM D5185m	>15	**2**	2	2
Nickel	ppm	ASTM D5185m	>15	**2**	5	2
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**3**	2	<1
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**21**	23	16
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**6**	6	6
Magnesium	ppm	ASTM D5185m		**0**	0	0
Calcium	ppm	ASTM D5185m		**31**	22	16
Phosphorus	ppm	ASTM D5185m		**630**	584	532
Zinc	ppm	ASTM D5185m		**329**	204	159

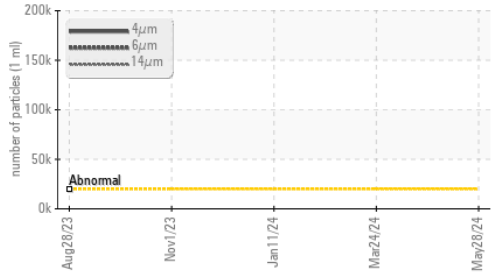
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**10**	10	13
Sodium	ppm	ASTM D5185m		**3**	2	2
Potassium	ppm	ASTM D5185m	>20	**0**	<1	1
Water	%	ASTM D6304	>0.2	**0.006**	0.012	0.043
ppm Water	ppm	ASTM D6304	>2000	**60**	126	430

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **160814**	---	---
Particles >6µm		ASTM D7647	>5000	▲ **100634**	---	---
Particles >14µm		ASTM D7647	>640	▲ **2783**	---	---
Particles >21µm		ASTM D7647	>160	**118**	---	---
Particles >38µm		ASTM D7647	>40	**2**	---	---
Particles >71µm		ASTM D7647	>10	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/24/19**	---	---

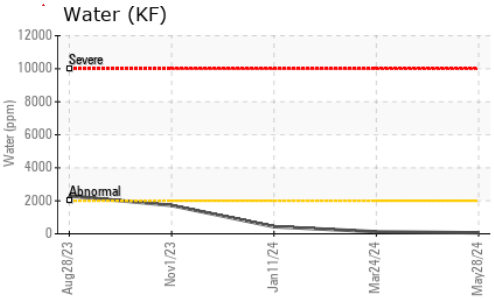
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.95**	1.12	1.22

OIL ANALYSIS REPORT

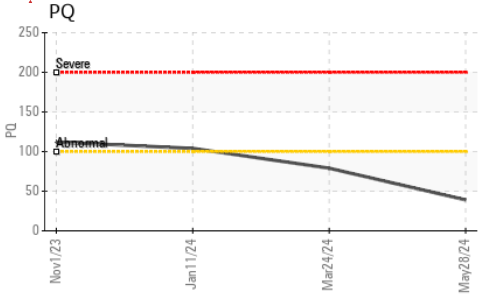
Particle Trend



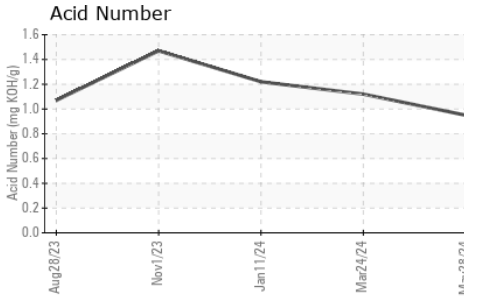
Water (KF)



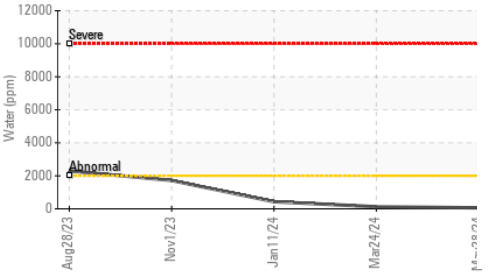
PQ



Acid Number



Water (KF)



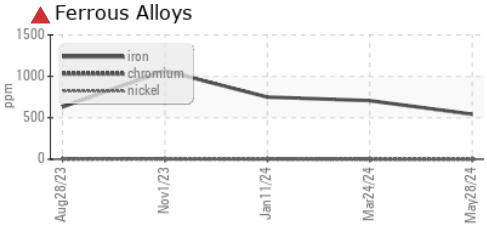
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	▲ HEAVY
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**213**	217	219

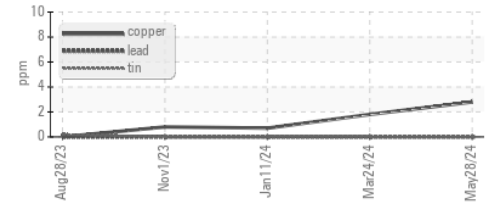
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

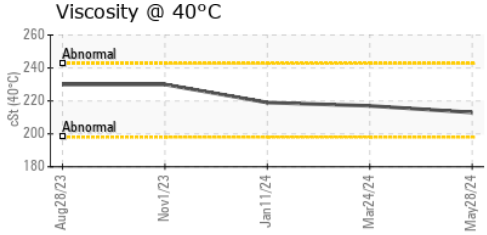
Ferrous Alloys



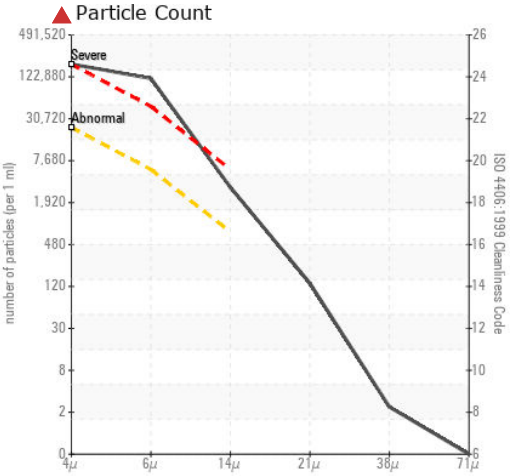
Non-ferrous Metals



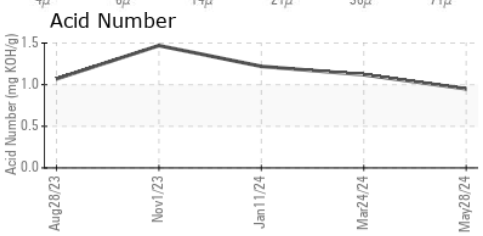
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0037946 **Received** : 10 Jun 2024
Lab Number : 06205369 **Tested** : 10 Jul 2024
Unique Number : 11072830 **Diagnosed** : 10 Jul 2024 - Sean Felton
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

Certificate L2367

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)

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