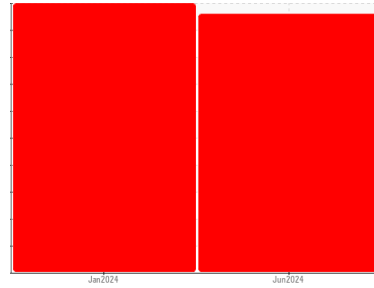


# PROBLEM SUMMARY

Sample Rating Trend



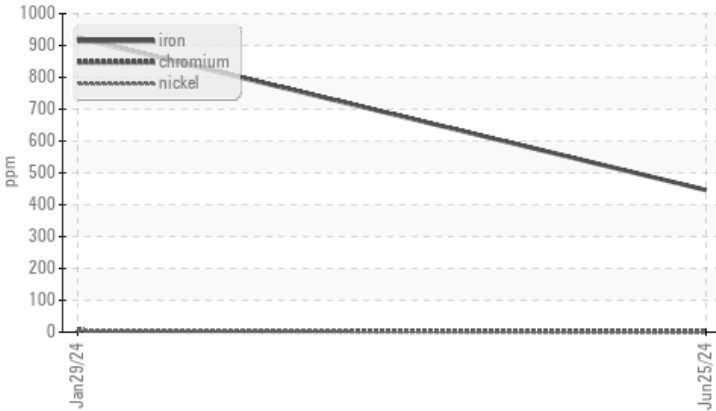
**WEAR**



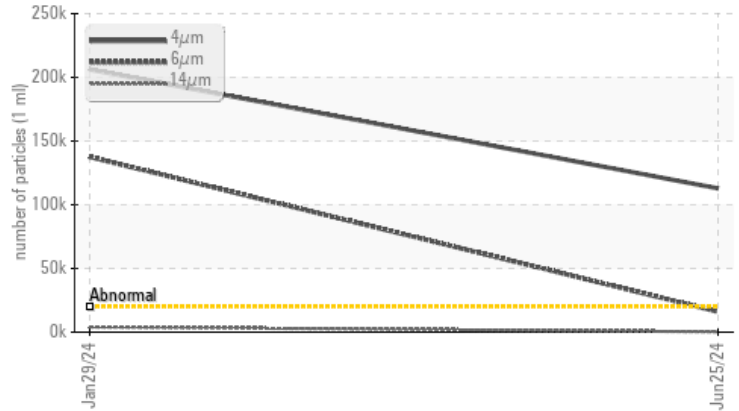
Area  
**TM 5**  
Machine Id  
**TM 5 CAL LEAD IN ROLL**  
Component  
**Gearbox**  
Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



### ▲ Particle Trend



## RECOMMENDATION

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	---
Iron	ppm	ASTM D5185m >200	▲ 446	▲ 924	---
Particles >4µm		ASTM D7647 >20000	▲ 112837	▲ 206242	---
Particles >6µm		ASTM D7647 >5000	▲ 16041	▲ 137603	---
Oil Cleanliness		ISO 4406 (c) >21/19/16	▲ 24/21/15	▲ 25/24/19	---

Customer Id: KIMMOBTM5  
Sample No.: RP0038087  
Lab Number: 06221175  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto: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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WEAR



**29 Jan 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. Gear wear is indicated. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.

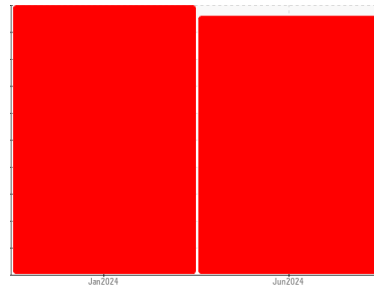
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area  
**TM 5**  
 Machine Id  
**TM 5 CAL LEAD IN ROLL**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

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 silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>RP0038087</b>	RP0038083	---
Sample Date	Client Info		<b>25 Jun 2024</b>	29 Jan 2024	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>SEVERE</b>	SEVERE	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>34</b>	65	---
Iron	ppm	ASTM D5185m >200	<b>▲ 446</b>	▲ 924	---
Chromium	ppm	ASTM D5185m >15	<b>2</b>	5	---
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	4	---
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >200	<b>1</b>	3	---
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>14</b>	8	---
Barium	ppm	ASTM D5185m 15	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 15	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>6</b>	10	---
Magnesium	ppm	ASTM D5185m 50	<b>1</b>	2	---
Calcium	ppm	ASTM D5185m 50	<b>&lt;1</b>	6	---
Phosphorus	ppm	ASTM D5185m 350	<b>412</b>	271	---
Zinc	ppm	ASTM D5185m 100	<b>11</b>	7	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	---
Water	%	ASTM D6304 >0.2	<b>0.013</b>	0.013	---
ppm Water	ppm	ASTM D6304 >2000	<b>135</b>	137	---

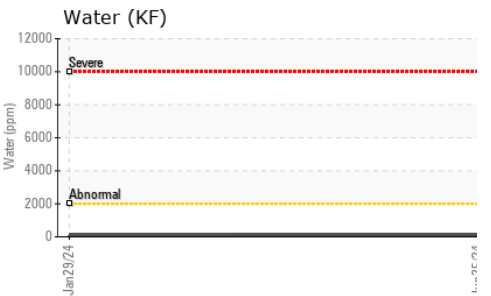
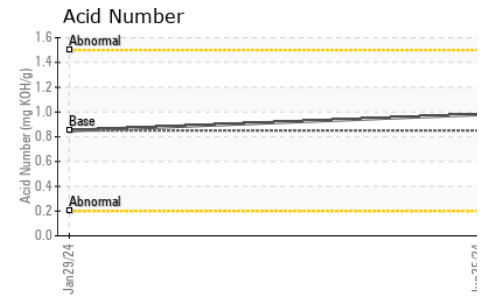
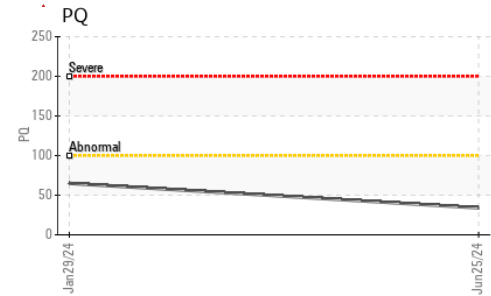
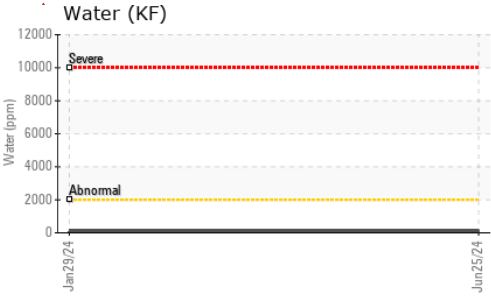
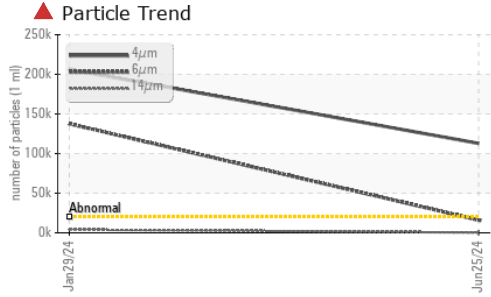
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 112837</b>	▲ 206242	---
Particles >6µm	ASTM D7647	>5000	<b>▲ 16041</b>	▲ 137603	---
Particles >14µm	ASTM D7647	>640	<b>218</b>	▲ 4047	---
Particles >21µm	ASTM D7647	>160	<b>26</b>	▲ 350	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	7	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 24/21/15</b>	▲ 25/24/19	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.98</b>	0.85	---

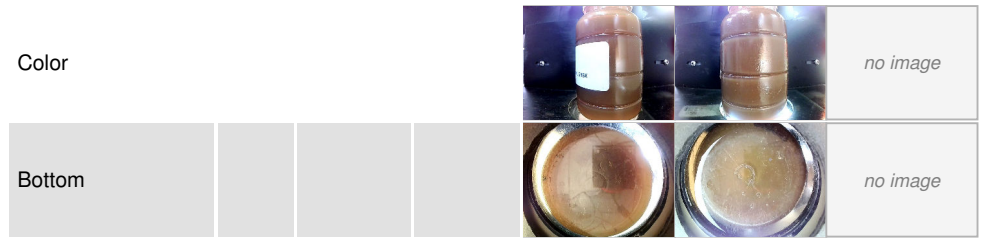
# OIL ANALYSIS REPORT



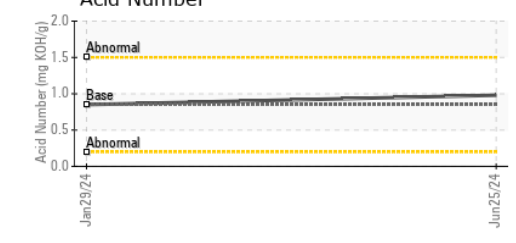
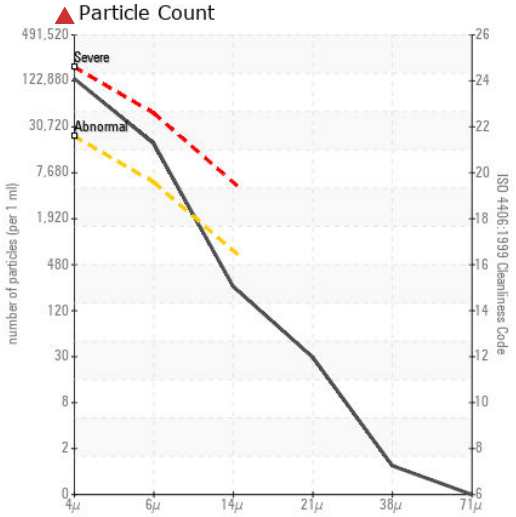
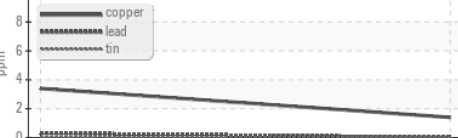
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	235	258

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038087 **Received** : 26 Jun 2024  
**Lab Number** : 06221175 **Tested** : 27 Jun 2024  
**Unique Number** : 11099372 **Diagnosed** : 27 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**Kimberly-Clark - Mobile - TM 5**  
 200 BAYBRIDGE RD  
 MOBILE, AL 36610  
 Contact: WAYNE PERRY  
 wayne.perry@kcc.com  
 T: (251)330-2386  
 F: (251)452-6335

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)