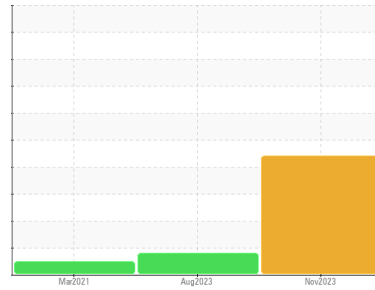


# PROBLEM SUMMARY

Sample Rating Trend



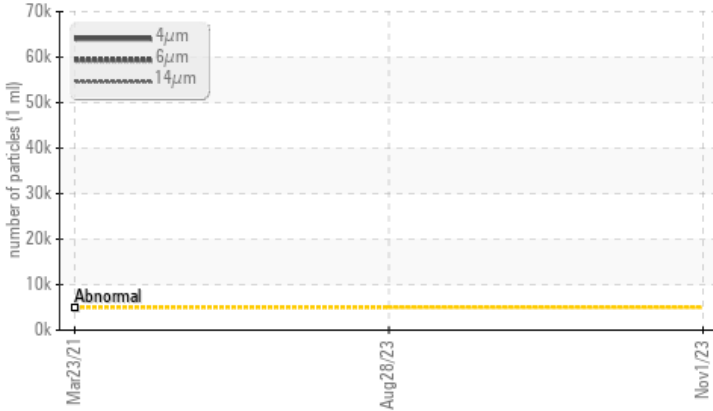
ISO



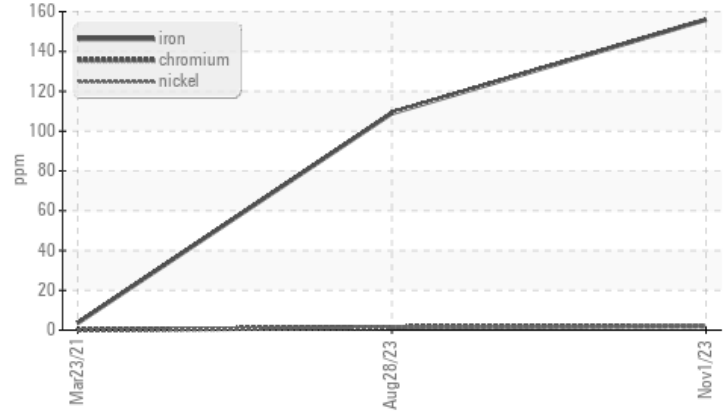
Area  
**TM 7**  
Machine Id  
**TM 7 VACUUM PUMP**  
Component  
**Pump**  
Fluid  
**ISO 220 (--- GAL)**

## COMPONENT CONDITION SUMMARY

Particle Trend



Ferrous Alloys



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m >90	▲ 156	▲ 109	4
Particles >4µm		ASTM D7647 >5000	● 61741	---	---
Particles >6µm		ASTM D7647 >1300	● 2557	---	---
Oil Cleanliness		ISO 4406 (c) >19/17/14	● 23/19/14	---	---

Customer Id: KIMMOBTM7  
Sample No.: RP0034390  
Lab Number: 05997375  
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
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

## HISTORICAL DIAGNOSIS

### 28 Aug 2023 Diag: Doug Bogart

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 23 Mar 2021 Diag: Doug Bogart

#### NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

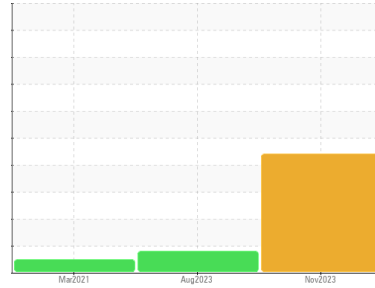
[view report](#)



# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**TM 7**  
 Machine Id  
**TM 7 VACUUM PUMP**  
 Component  
**Pump**  
 Fluid  
**ISO 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

The iron level is abnormal. All other component wear rates are normal.

### 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. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>RP0034390</b>	RP0034360	RP202927
Sample Date	Client Info		<b>01 Nov 2023</b>	28 Aug 2023	23 Mar 2021
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>107</b>	---	---
Iron	ppm	ASTM D5185m >90	<b>156</b>	109	4
Chromium	ppm	ASTM D5185m >5	<b>2</b>	2	0
Nickel	ppm	ASTM D5185m >5	<b>2</b>	1	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>1</b>	0	<1
Tin	ppm	ASTM D5185m >9	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>26</b>	17	4
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	2
Calcium	ppm	ASTM D5185m	<b>12</b>	8	16
Phosphorus	ppm	ASTM D5185m	<b>370</b>	324	275
Zinc	ppm	ASTM D5185m	<b>197</b>	169	383

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>36</b>	19	11
Sodium	ppm	ASTM D5185m	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	1
Water	%	ASTM D6304 >.1	<b>0.012</b>	0.013	0.014
ppm Water	ppm	ASTM D6304 >1000	<b>128.1</b>	137.5	142.8

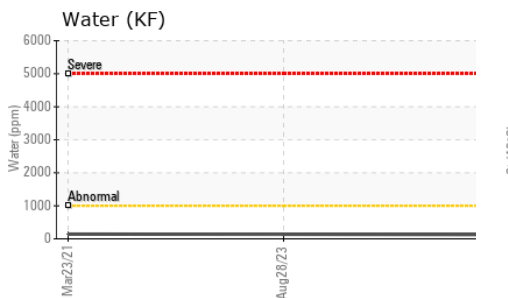
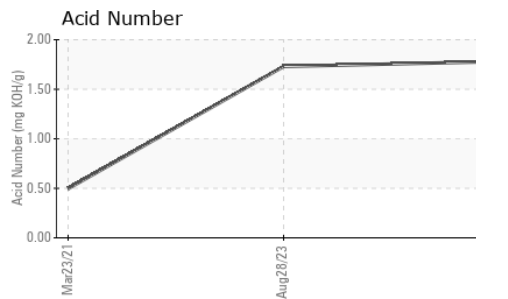
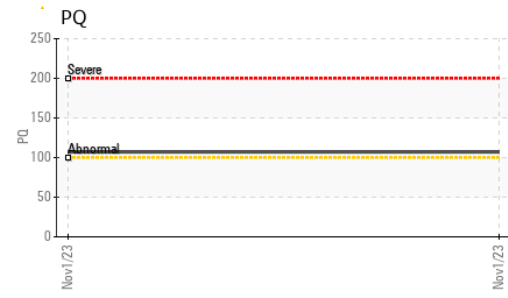
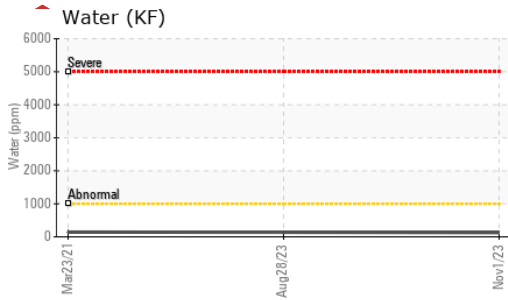
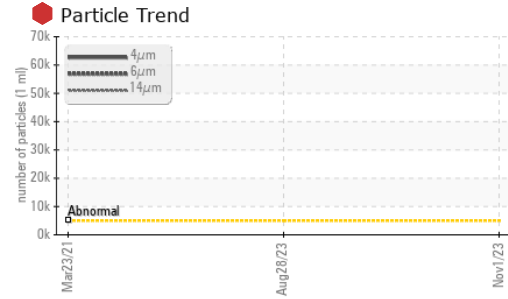
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>61741</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>2557</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>89</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>38</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>2</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>23/19/14</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.78</b>	1.73	0.496

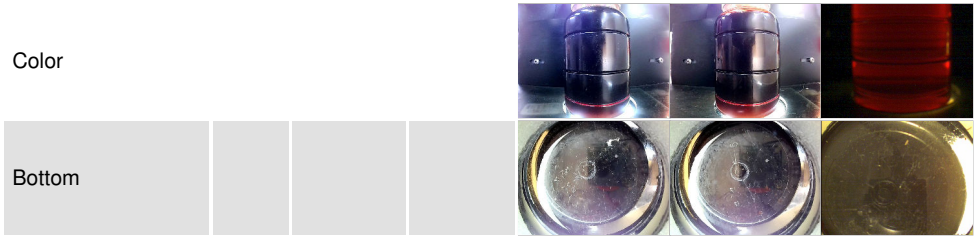
# OIL ANALYSIS REPORT



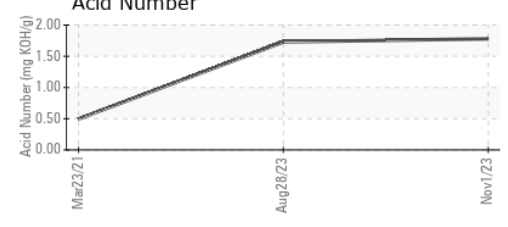
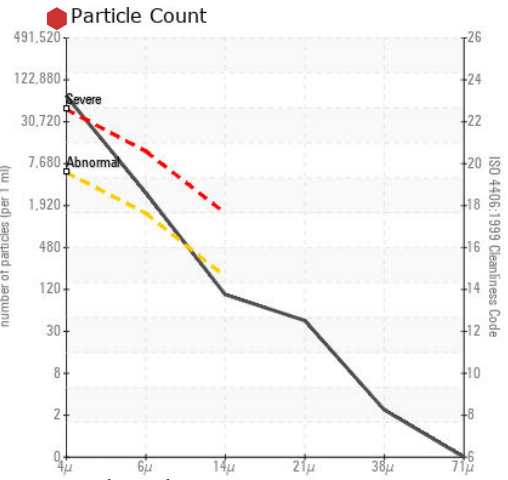
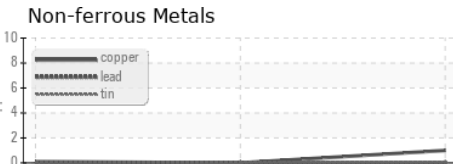
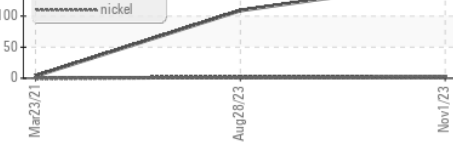
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	226	206

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034390 **Received** : 02 Nov 2023  
**Lab Number** : 05997375 **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10725735 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**Kimberly-Clark - Mobile - TM 7**  
 200 BAYBRIDGE RD  
 MOBILE, AL  
 US 36610  
 Contact: BRAD SNOW  
 brad.snow@kcc.com  
 T:  
 F: (251)452-6335

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)