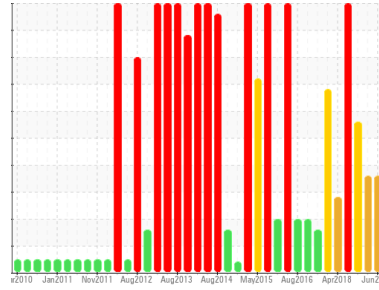


PROBLEM SUMMARY

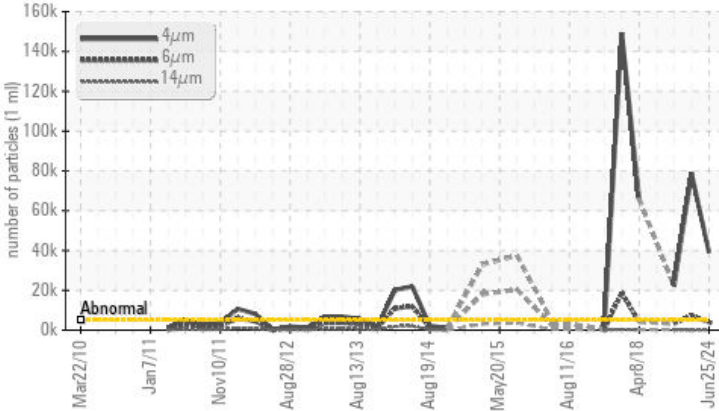
Area
TM 5
Machine Id
TM 5 - 7 and 8 VACUUM PUMP
Component
Pump
Fluid
GEAR OIL ISO 220 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	SEVERE
Particles >4µm	ASTM D7647	>5000	▲ 39046	▲ 78788	▲ 22113
Particles >6µm	ASTM D7647	>1300	▲ 4034	▲ 7227	▲ 3281
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/13	▲ 23/20/14	▲ 22/19/15

Customer Id: KIMMOBTM5
Sample No.: RP0030494
Lab Number: 06221169
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

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

ISO



29 Jan 2024 Diag: Jonathan Hester

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



ISO



24 May 2023 Diag: Don Baldrige

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



WEAR



25 May 2021 Diag: Angela Borella

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. NOTE: Performing ferrography analysis may provide us with more detailed information regarding this unit's wear condition. Copper and iron ppm levels are severe. Aluminum, chromium and nickel ppm levels are abnormal. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

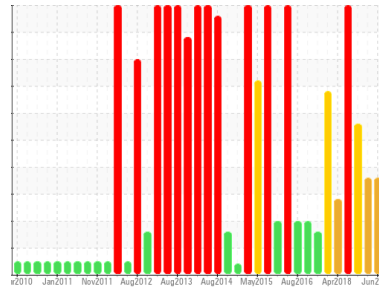
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
TM 5
 Machine Id
TM 5 - 7 and 8 VACUUM PUMP
 Component
Pump
 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 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			RP0030494	RP0038117	RP0023596
Sample Date	Client Info			25 Jun 2024	29 Jan 2024	24 May 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	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		14	21	12
Iron	ppm	ASTM D5185m	>90	27	20	4
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	2	2	1
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	4	3	<1
Tin	ppm	ASTM D5185m	>9	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

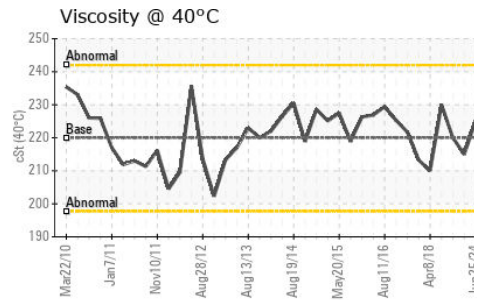
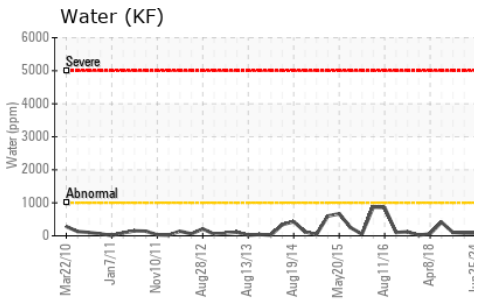
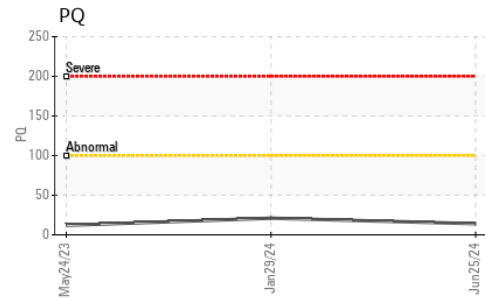
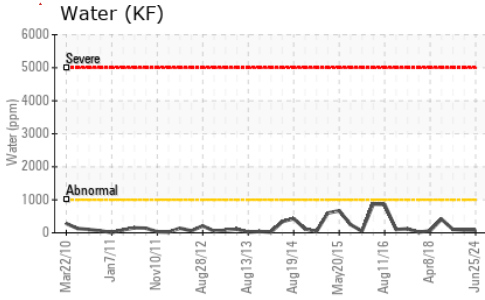
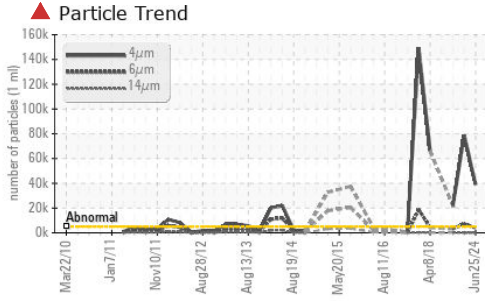
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	1	0	0
Barium	ppm	ASTM D5185m	15	0	0	0
Molybdenum	ppm	ASTM D5185m	15	0	<1	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	50	<1	1	1
Calcium	ppm	ASTM D5185m	50	23	24	<1
Phosphorus	ppm	ASTM D5185m	350	467	386	413
Zinc	ppm	ASTM D5185m	100	16	3	14

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	6	3	<1
Sodium	ppm	ASTM D5185m		1	0	1
Potassium	ppm	ASTM D5185m	>20	2	2	0
Water	%	ASTM D6304	>.1	0.007	0.008	0.010
ppm Water	ppm	ASTM D6304	>1000	76	85	102.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 39046	▲ 78788	▲ 22113
Particles >6µm		ASTM D7647	>1300	▲ 4034	▲ 7227	▲ 3281
Particles >14µm		ASTM D7647	>160	47	85	▲ 170
Particles >21µm		ASTM D7647	>40	5	13	34
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/19/13	▲ 23/20/14	▲ 22/19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.92	0.71	0.96

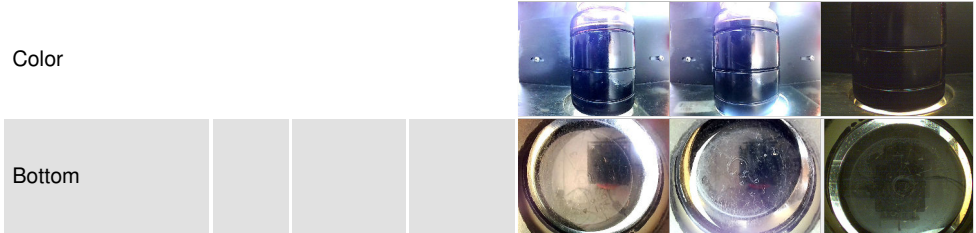
OIL ANALYSIS REPORT



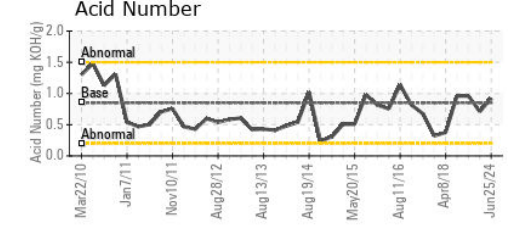
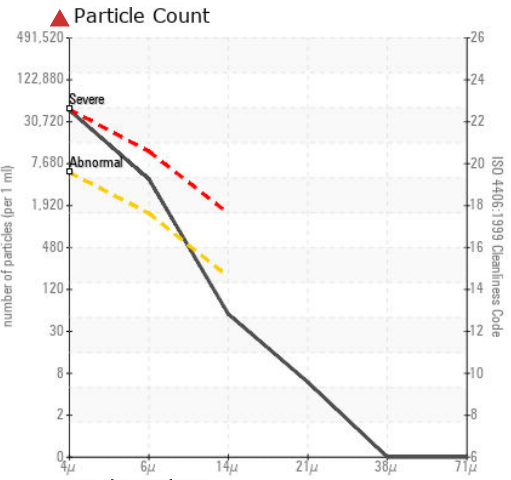
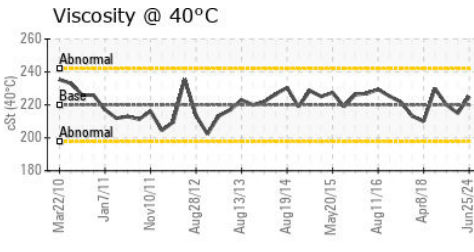
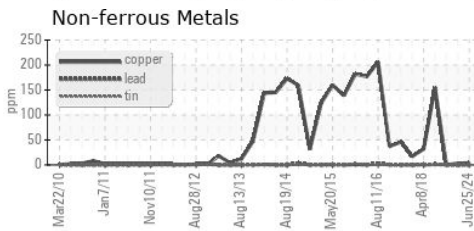
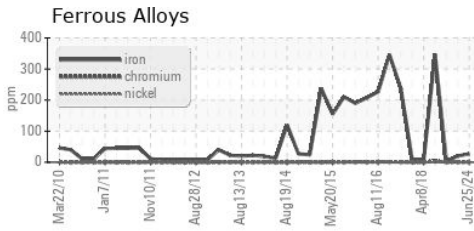
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	225	215

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0030494
Lab Number : 06221169
Unique Number : 11099366
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

Kimberly-Clark - Mobile - TM 5
 200 BAYBRIDGE RD
 MOBILE, AL
 US 36610

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 : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Don Baldrige

Contact: WAYNE PERRY

wayne.perry@kcc.com

T: (251)330-2386

F: (251)452-6335