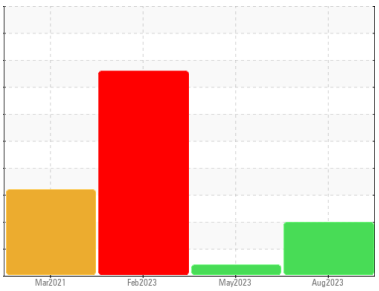
PROBLEM SUMMARY

Sample Rating Trend

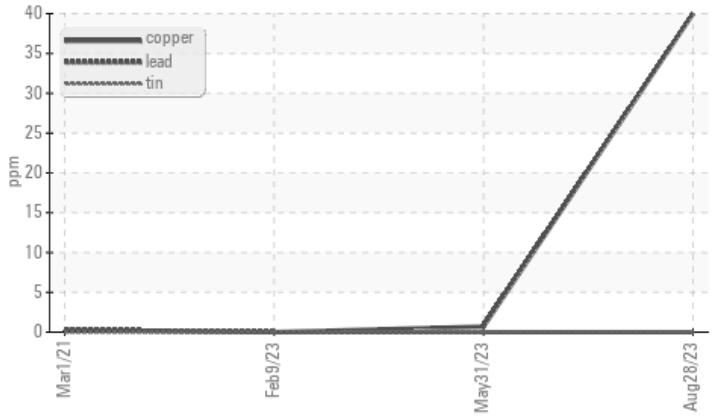


WEAR

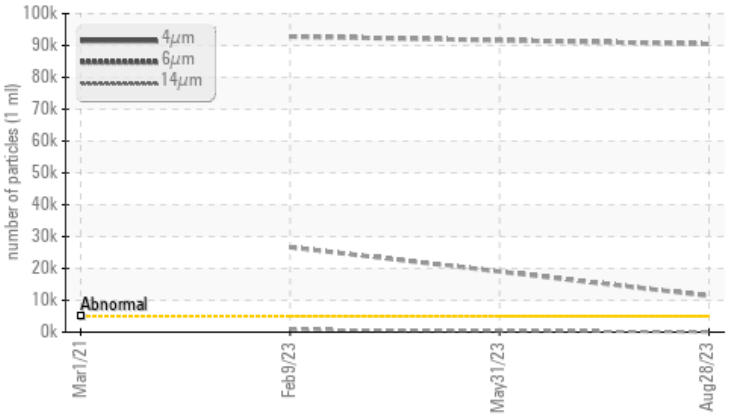
Area
TM 7
Machine Id
TM 7 MACHINE LUBE
Component
Lube System
Fluid
ISO 220 (--- GAL)

COMPONENT CONDITION SUMMARY

Non-ferrous Metals



Particle Trend



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				ABNORMAL	ABNORMAL	SEVERE
Copper	ppm	ASTM D5185m	>20	▲ **40**	<1	0
Particles >4µm		ASTM D7647	>5000	▲ **90466**	---	⬢ 92799
Particles >6µm		ASTM D7647	>1300	▲ **11379**	---	⬢ 26660
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/21/13**	---	⬢ 24/22/17

Customer Id: KIMMOBTM7
Sample No.: RP0034361
Lab Number: 05937916
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
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

31 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

09 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.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

01 Mar 2021 Diag: Doug Bogart

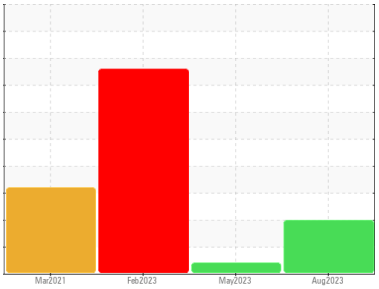
WATER

We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor.All component wear rates are normal. Free water present. There is a light concentration of water present 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



WEAR

Area
TM 7
Machine Id
TM 7 MACHINE LUBE
Component
Lube System
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 copper 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0034361**	RP0034929	RP05774424
Sample Date		Client Info		**28 Aug 2023**	31 May 2023	09 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				**ABNORMAL**	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**12**	12	13
Iron	ppm	ASTM D5185m	>20	**22**	3	<1
Chromium	ppm	ASTM D5185m	>20	**0**	<1	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	0	0
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	▲ **40**	<1	0
Tin	ppm	ASTM D5185m	>20	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	<1
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**3**	4	9
Calcium	ppm	ASTM D5185m		**90**	90	35
Phosphorus	ppm	ASTM D5185m		**500**	434	230
Zinc	ppm	ASTM D5185m		**591**	493	283

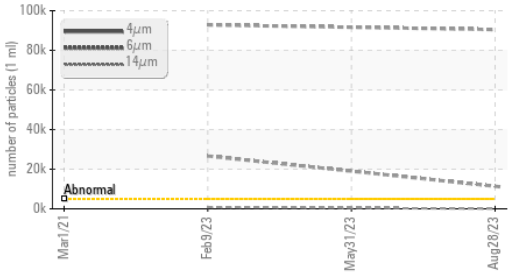
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**6**	6	5
Sodium	ppm	ASTM D5185m		**33**	32	33
Potassium	ppm	ASTM D5185m	>20	**2**	2	1
Water	%	ASTM D6304	>0.05	**0.007**	0.023	0.018
ppm Water	ppm	ASTM D6304	>500	**78.9**	237.9	180.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **90466**	---	⬢ 92799
Particles >6µm		ASTM D7647	>1300	▲ **11379**	---	⬢ 26660
Particles >14µm		ASTM D7647	>160	**49**	---	⬢ 799
Particles >21µm		ASTM D7647	>40	**8**	---	⬢ 108
Particles >38µm		ASTM D7647	>10	**2**	---	2
Particles >71µm		ASTM D7647	>3	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/21/13**	---	⬢ 24/22/17

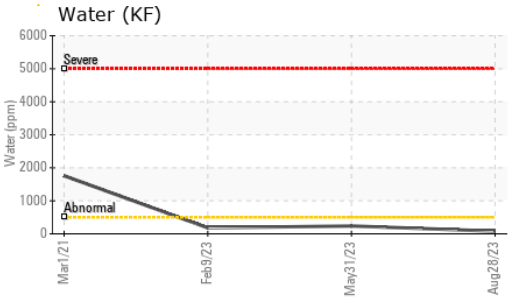
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.49**	0.48	0.34

OIL ANALYSIS REPORT

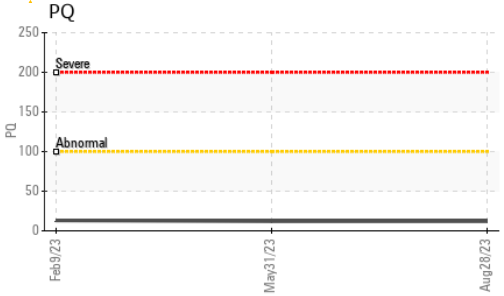
Particle Trend



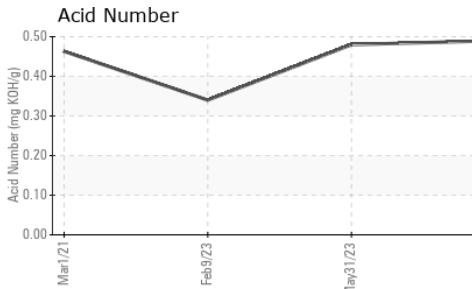
Water (KF)



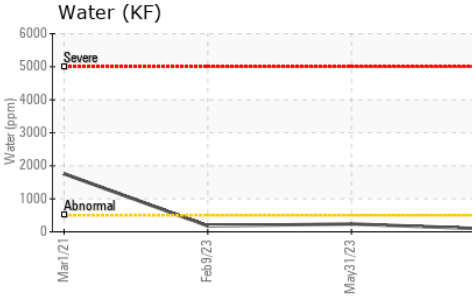
PQ



Acid Number



Water (KF)



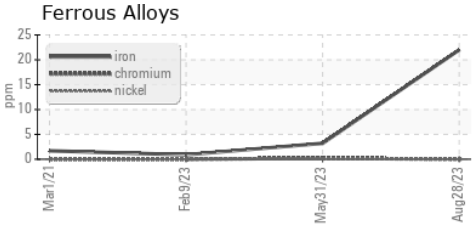
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	▲ MODER	VLITE
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	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**216**	216	217

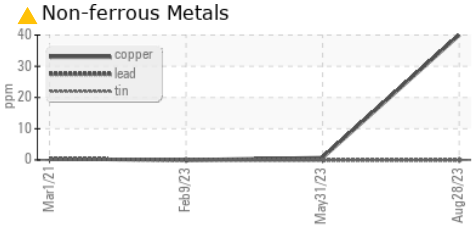
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

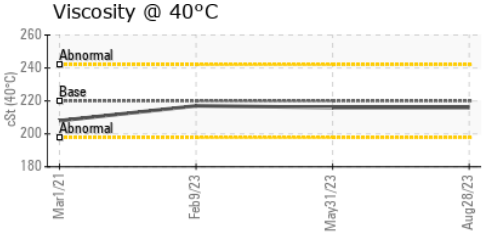
Ferrous Alloys



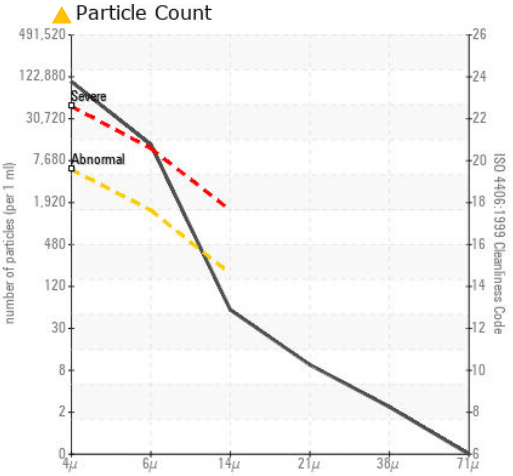
Non-ferrous Metals



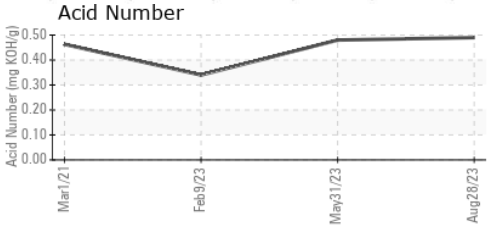
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034361 **Received** : 29 Aug 2023
Lab Number : 05937916 **Diagnosed** : 21 Sep 2023
Unique Number : 10628528 **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)

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