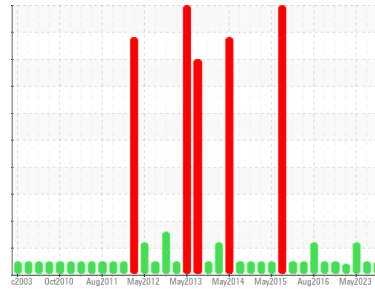




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
TM 5
 Machine Id
TM 5 WIRE TURNING ROLL GRBX
 Component
Gearbox
 Fluid
GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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	RP0038088	RP0038085	RP0023602
Sample Date	Client Info	25 Jun 2024	29 Jan 2024	24 May 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	33	34	22	
Iron	ppm	ASTM D5185m >200	39	41	36
Chromium	ppm	ASTM D5185m >15	0	<1	0
Nickel	ppm	ASTM D5185m >15	0	0	<1
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	<1
Lead	ppm	ASTM D5185m >100	0	<1	0
Copper	ppm	ASTM D5185m >200	<1	<1	0
Tin	ppm	ASTM D5185m >25	0	<1	0
Antimony	ppm	ASTM D5185m >5	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	12	14	7
Barium	ppm	ASTM D5185m 15	<1	0	0
Molybdenum	ppm	ASTM D5185m 15	0	<1	0
Manganese	ppm	ASTM D5185m	1	<1	1
Magnesium	ppm	ASTM D5185m 50	<1	0	<1
Calcium	ppm	ASTM D5185m 50	4	2	4
Phosphorus	ppm	ASTM D5185m 350	365	355	366
Zinc	ppm	ASTM D5185m 100	37	20	23

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	1	1	<1
Sodium	ppm	ASTM D5185m	5	1	6
Potassium	ppm	ASTM D5185m >20	1	2	0
Water	%	ASTM D6304 >0.2	0.015	0.014	0.021
ppm Water	ppm	ASTM D6304 >2000	156	144	219.1

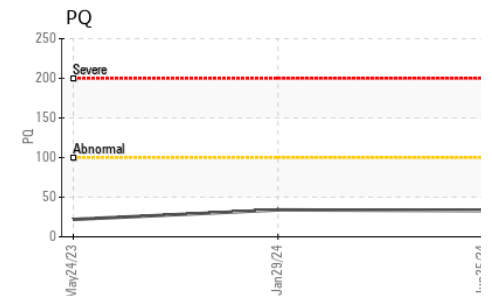
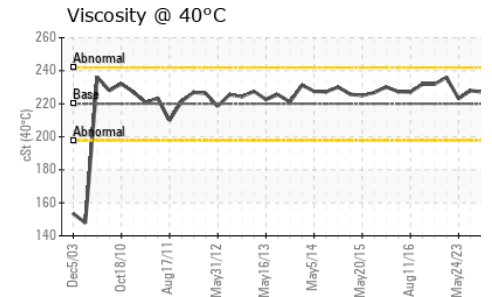
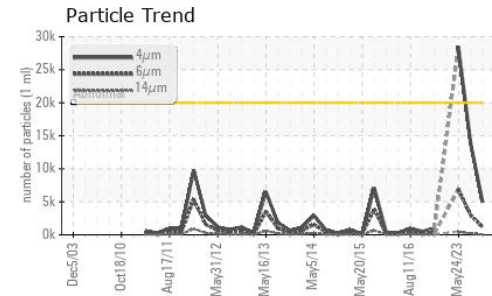
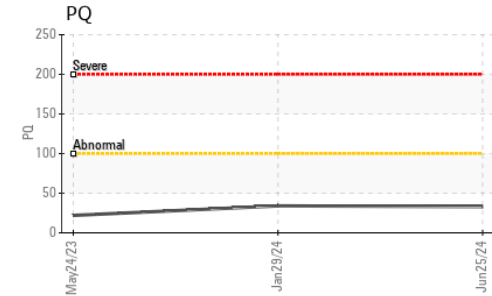
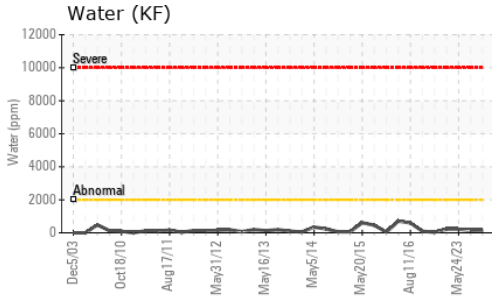
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	4930	13901	▲ 28435
Particles >6µm	ASTM D7647 >5000	1153	3006	▲ 6822
Particles >14µm	ASTM D7647 >640	49	200	476
Particles >21µm	ASTM D7647 >160	8	46	116
Particles >38µm	ASTM D7647 >40	1	1	4
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	19/17/13	21/19/15	▲ 22/20/16

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	1.48	1.46	1.38

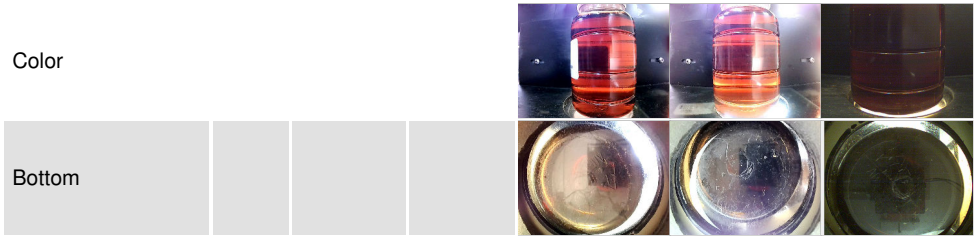
OIL ANALYSIS REPORT



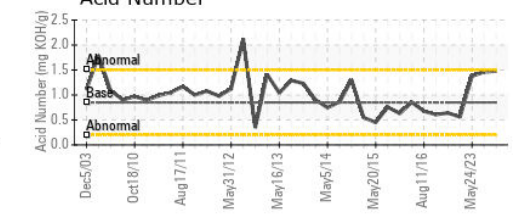
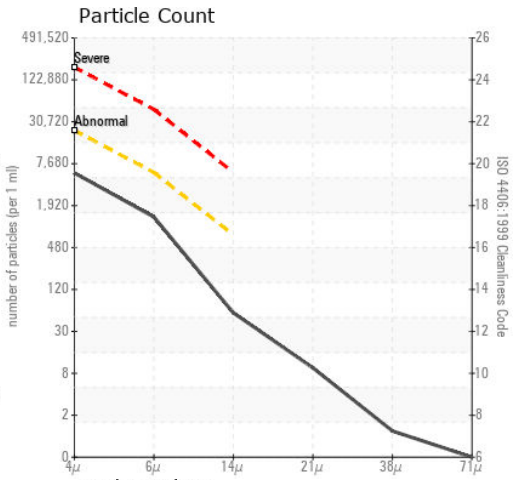
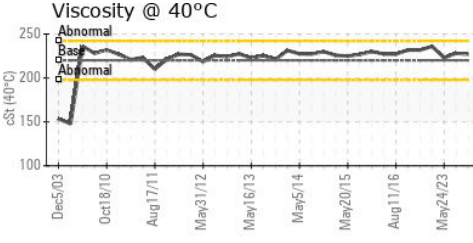
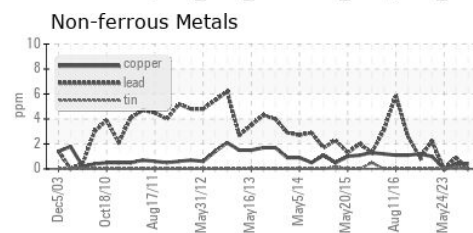
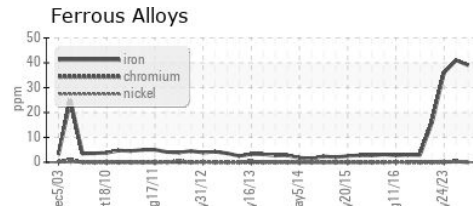
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	227	228

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038088 **Received** : 26 Jun 2024
Lab Number : 06221171 **Tested** : 27 Jun 2024
Unique Number : 11099368 **Diagnosed** : 27 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

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