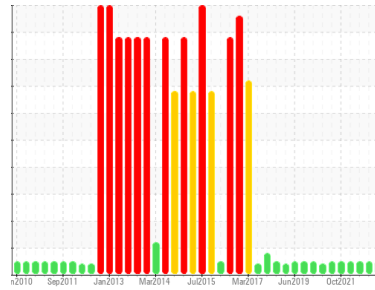




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**TM 11**  
 Machine Id  
**TM 11 YANKEE REDUCER**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNERGY 140/320 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**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>RP0034365</b>	RP0034366	RP0023579
Sample Date	Client Info		<b>08 Aug 2023</b>	07 Aug 2023	05 May 2023
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>NORMAL</b>	---	NORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>8</b>	22	11
Iron	ppm	ASTM D5185m >200	<b>4</b>	21	3
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	<1	1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>28</b>	▲ 27	22
Barium	ppm	ASTM D5185m	<b>19</b>	▲ 20	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>2</b>	15	<1
Phosphorus	ppm	ASTM D5185m 200	<b>435</b>	380	453
Zinc	ppm	ASTM D5185m	<b>32</b>	64	0

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>7</b>	28	4
Sodium	ppm	ASTM D5185m	<b>1</b>	6	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	0
Water	%	ASTM D6304 >0.2	<b>0.016</b>	0.014	0.016
ppm Water	ppm	ASTM D6304 >2000	<b>166.6</b>	143.2	161.2

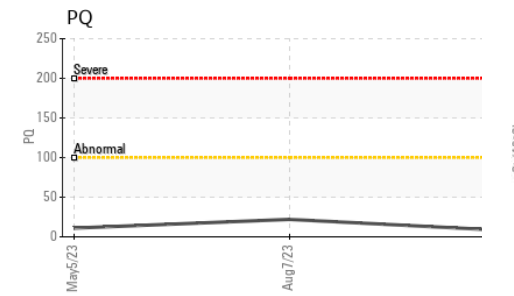
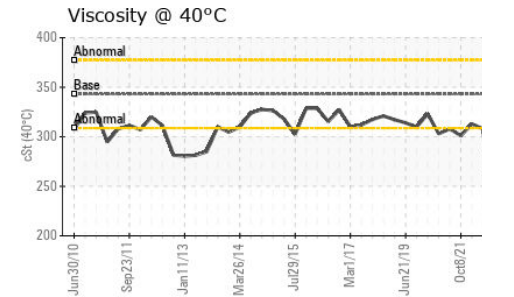
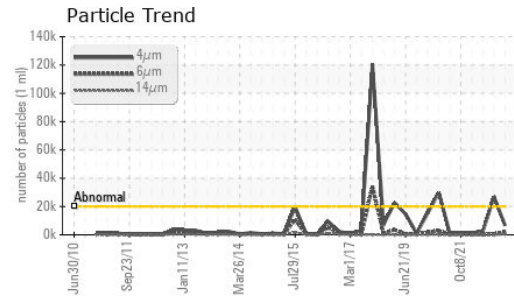
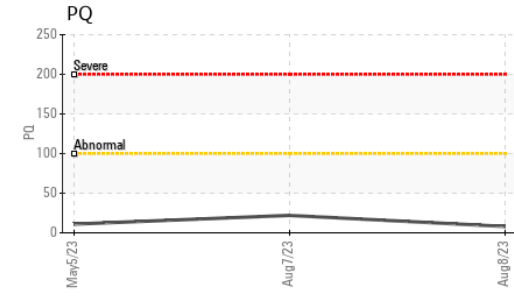
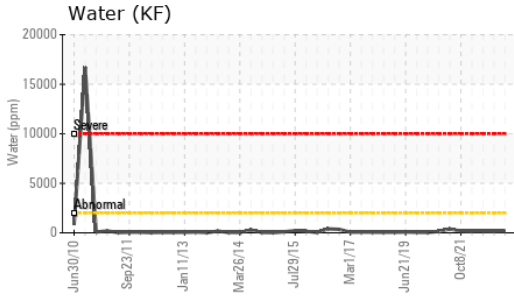
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>6597</b>	▲ 26895	2537
Particles >6µm	ASTM D7647	>5000	<b>1999</b>	757	177
Particles >14µm	ASTM D7647	>640	<b>403</b>	26	8
Particles >21µm	ASTM D7647	>160	<b>105</b>	7	2
Particles >38µm	ASTM D7647	>40	<b>4</b>	1	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>20/18/16</b>	▲ 22/17/12	19/15/10

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.2	<b>1.26</b>	1.41	1.37

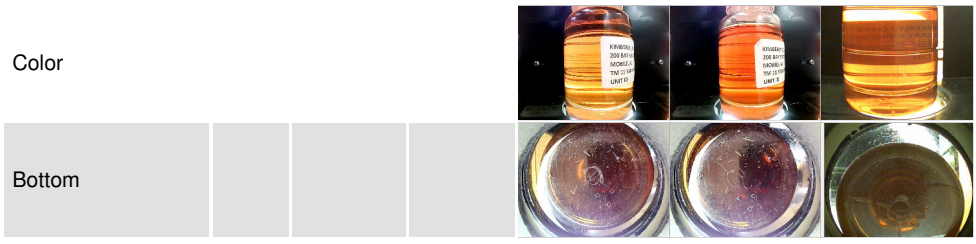
# OIL ANALYSIS REPORT



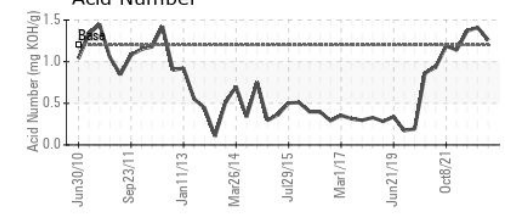
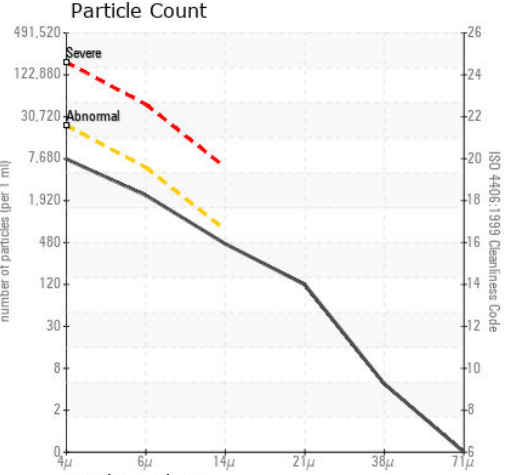
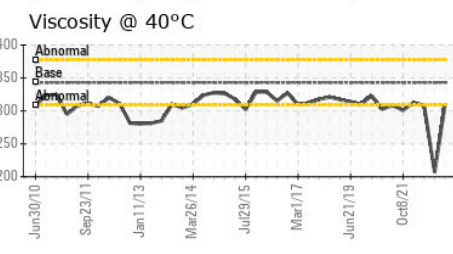
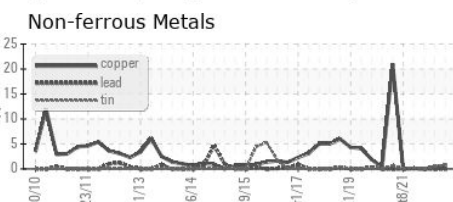
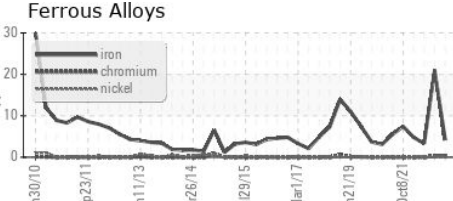
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	343	311	207

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034365 **Received** : 31 Oct 2023  
**Lab Number** : 05994351 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10722711 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**Kimberly-Clark - Mobile - TM 11**  
 200 BAYBRIDGE RD  
 MOBILE, AL  
 US 36610  
 Contact: LARRY WEAVER  
 Larry.D.Weaver@kcc.com  
 T:  
 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)