

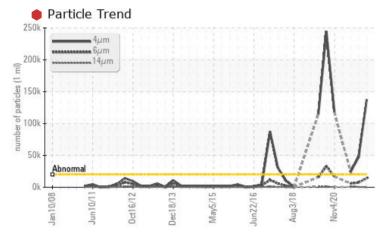
PROBLEM SUMMARY

TM 11 Machine Id TM 11 PRESSURE ROLL REDUCER

Gearbox

ROYAL PURPLE SYNERGY 90/220 (--- GAL)

COMPONENT CONDITION SUMMARY



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	SEVERE	ABNORMAL		
Particles >4µm	ASTM D7647	>20000	e 137565	47342	A 23907		
Particles >6µm	ASTM D7647	>5000	🛑 14216	<u> </u>	5 708		
Oil Cleanliness	ISO 4406 (c)	>21/19/16	e 24/21/13	23/20/16	▲ 22/20/16		

Customer Id: KIMMOBTM11 Sample No.: RP0023580 Lab Number: 05870299 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

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



30 Mar 2022 Diag: Doug Bogart

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 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

08 Oct 2021 Diag: Doug Bogart



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 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.

19 Apr 2021 Diag: Doug Bogart

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 suitable for further service.









OIL ANALYSIS REPORT

Area TM 11 TM 11 PRESSURE ROLL REDUCER Component

Gearbox Fluid

ROYAL PURPLE SYNERGY 90/220 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

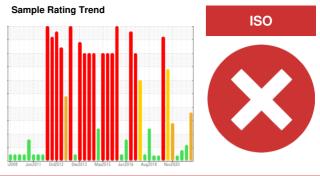
All component wear rates are normal.

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.



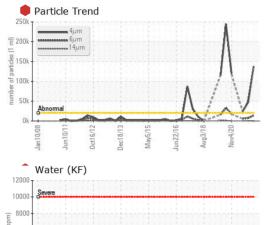
	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0023580	RP0016705	RP0016648
Sample Date		Client Info		05 May 2023	30 Mar 2022	08 Oct 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		23		
Iron	ppm	ASTM D5185m	>200	62	65	67
Chromium	ppm	ASTM D5185m	>15	0	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	8	7
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	<1	1	2
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5			3
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		19	19	16
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
				•	0	0
Phosphorus	ppm	ASTM D5185m	370	232	238	214
	ppm ppm	ASTM D5185m ASTM D5185m	370	-		
	ppm		370 limit/base	232	238	214 6
	ppm	ASTM D5185m	limit/base	232 0	238 6	214 6
Zinc CONTAMINANTS Silicon	ppm	ASTM D5185m method	limit/base	232 0 current	238 6 history1	214 6 history2
Zinc CONTAMINANTS Silicon Sodium	ppm ppm	ASTM D5185m method ASTM D5185m	limit/base	232 0 current 3	238 6 history1 3	214 6 history2 2
Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >50 >20	232 0 current 3 2	238 6 history1 3 <1	214 6 history2 2 <1
Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >50 >20 >0.2	232 0 current 3 2 0	238 6 history1 3 <1 0	214 6 history2 2 <1 0
Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	limit/base >50 >20 >0.2	232 0 current 3 2 0 0 0.013	238 6 history1 3 <1 0 0.009	214 6 history2 2 <1 0 0.025
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	limit/base >50 >20 >0.2 >2000	232 0 current 3 2 0 0.013 130.6	238 6 history1 3 <1 0 0.009 97.6	214 6 history2 2 <1 0 0.025 258.5
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	limit/base >50 >20 >0.2 >2000 limit/base >20000	232 0 current 3 2 0 0.013 130.6 current	238 6 history1 3 <1 0 0.009 97.6 history1	214 6 history2 2 <1 0 0.025 258.5 history2
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647	limit/base >50 >20 >0.2 >2000 limit/base >20000	232 0 current 3 2 0 0.013 130.6 current • 137565	238 6 history1 3 <1 0 0.009 97.6 history1 ▲ 47342	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647	limit/base >50 >20 >0.2 >2000 20000 limit/base >20000 >5000 >5000 >640	232 0 current 3 2 0 0.013 130.6 current 137565 14216	238 6 history1 3 <1 0 0.009 97.6 history1 ↓47342 ↓7352	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907 ▲ 5708
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 >0.2 >2000 20000 limit/base >20000 >5000 >5000 >640	232 0 current 3 2 0 0.013 130.6 current 137565 14216 41	238 6 history1 3 <1 0 0.009 97.6 history1 ↓47342 ↓7352 594	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907 ▲ 5708 605
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 >0.2 >2000 limit/base >20000 >5000 >5000 >640 >160 >40	232 0 Current 3 2 0 0 0.013 130.6 Current • 137565 • 14216 41 6	238 6 history1 3 <1 0 0.009 97.6 history1 ↓ 47342 ↓ 7352 594 110	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907 ▲ 5708 605 131
Silicon Sodium Potassium Water opm Water	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 >0.2 >2000 limit/base >20000 >5000 >5000 >640 >160 >40	232 0 Current 3 2 0 0.013 130.6 Current 137565 14216 41 6 1	238 6 history1 3 <10 0.009 97.6 history1 ▲ 47342 ▲ 7352 594 110 6	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907 ▲ 23907 ▲ 5708 605 131 9
Zinc CONTAMINANTS Silicon Sodium Potassium Water opm Water FLUID CLEANLIN Particles >4µm Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm VESS	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 MSTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >50 >20 >0.2 >2000 limit/base >20000 >5000 >5000 >640 >160 >40 >10	232 0 current 3 2 0 0.013 130.6 current 137565 14216 41 6 1 1	238 6 history1 3 <10 0.009 97.6 history1 ↓47342 ↓7352 594 110 6 0	214 6 history2 2 <1 0 0.025 258.5 history2 ▲ 23907 ▲ 5708 605 131 9 2

Report Id: KIMMOBTM11 [WUSCAR] 05870299 (Generated: 09/21/2023 06:31:45) Rev: 1

Contact/Location: LARRY WEAVER - KIMMOBTM11

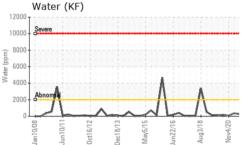


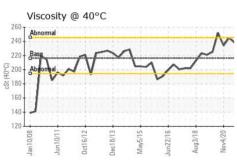
OIL ANALYSIS REPORT



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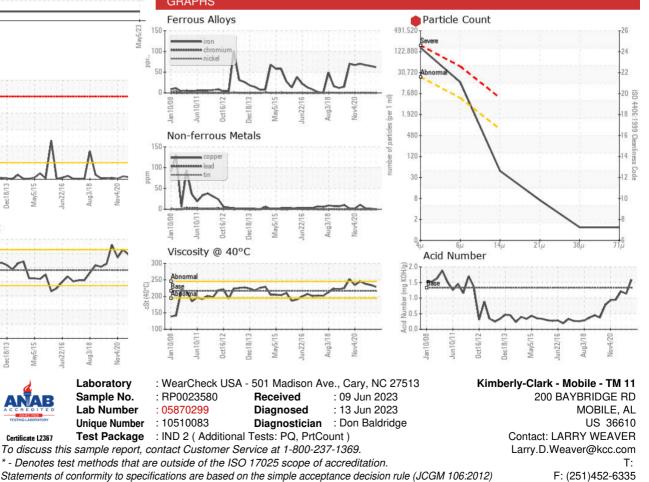






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	216.1	229	234	238
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color						
Bottom						





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: LARRY WEAVER - KIMMOBTM11