



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**2WM/TH/JPBD**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 320 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0807523</b>	WC0695302	WC0695022
Sample Date		Client Info		<b>15 Mar 2024</b>	11 Oct 2023	14 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	0	29914
Oil Age	hrs	Client Info		<b>37524</b>	33807	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>19</b>	12	19
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

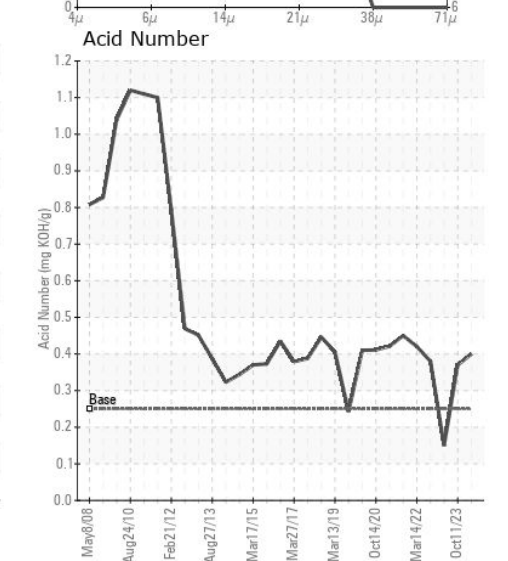
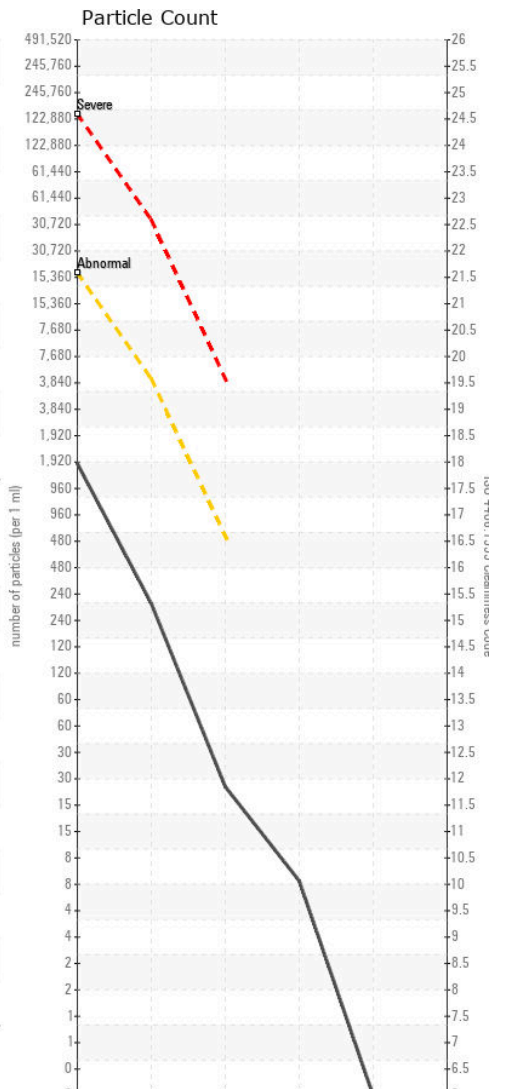
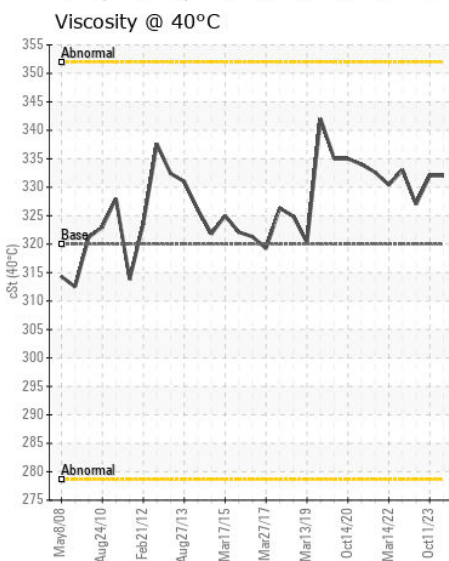
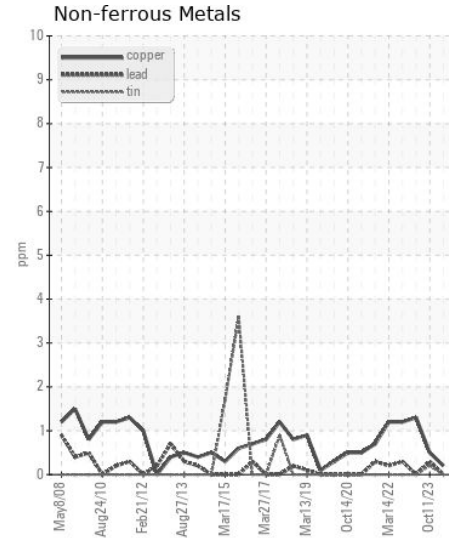
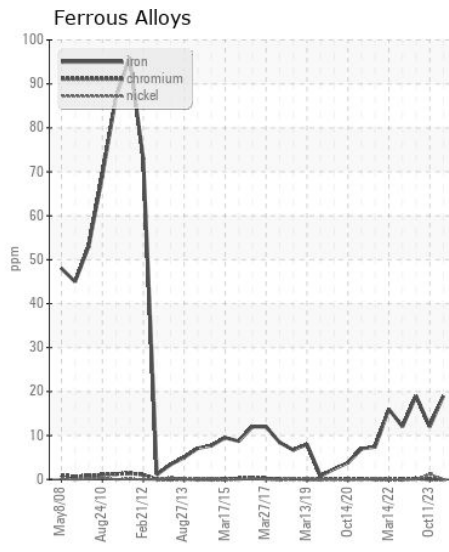
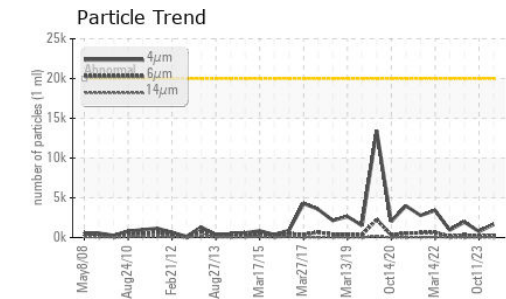
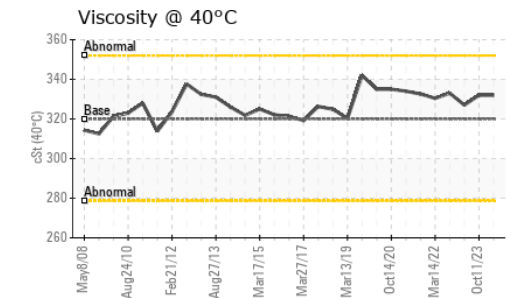
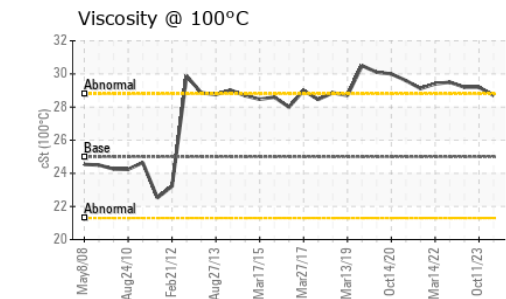
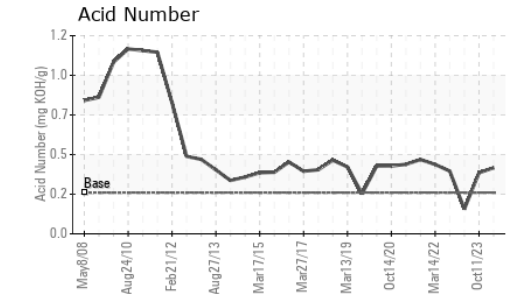
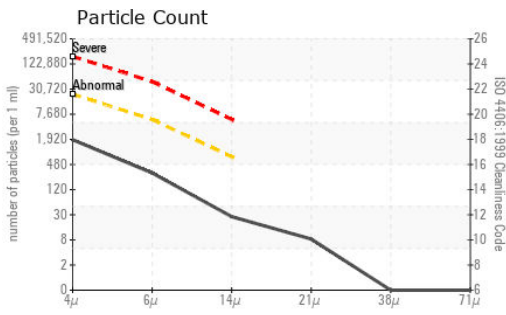
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>0</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Water	%	ASTM D6304	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>1648</b>	753	1955
Particles >6µm		ASTM D7647	>5000	<b>264</b>	153	323
Particles >14µm		ASTM D7647	>640	<b>24</b>	9	22
Particles >21µm		ASTM D7647	>160	<b>7</b>	3	5
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/15/12</b>	17/14/10	18/16/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	1	2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	90	<b>13</b>	15	31
Calcium	ppm	ASTM D5185m		<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	<1	0
Zinc	ppm	ASTM D5185m		<b>6</b>	0	3
Sulfur	ppm	ASTM D5185m		<b>21631</b>	18289	22531
Acid Number (AN)	mg KOH/g	ASTM D8045	0.25	<b>0.40</b>	0.37	0.15
Visc @ 40°C	cSt	ASTM D445	320	<b>332</b>	332	327
Visc @ 100°C	cSt	ASTM D445	25	<b>28.7</b>	29.2	29.2
Viscosity Index (VI)	Scale	ASTM D2270	100	<b>117</b>	120	122



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0807523 **Received** : 24 Apr 2024  
**Lab Number** : 06159095 **Tested** : 26 Apr 2024  
**Unique Number** : 10994518 **Diagnosed** : 26 Apr 2024 - Jonathan Hester  
**Test Package** : PLANT ( Additional Tests: KV100, VI )

**JPHYTEC**  
 JP  
 Contact: Service

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)