



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area  
**RIG 565**  
Machine Id  
**R565-MP-02**  
Component  
**Gearbox**  
Fluid  
**GEAR OIL ISO 320 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0013627</b>	KL0014480	KL0014287
Sample Date		Client Info		<b>04 Jul 2024</b>	11 Jun 2024	09 May 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	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>ATTENTION</b>	ATTENTION	ATTENTION

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>7</b>	4	4
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

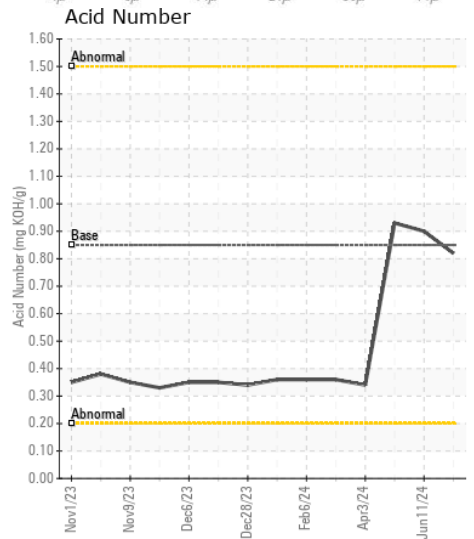
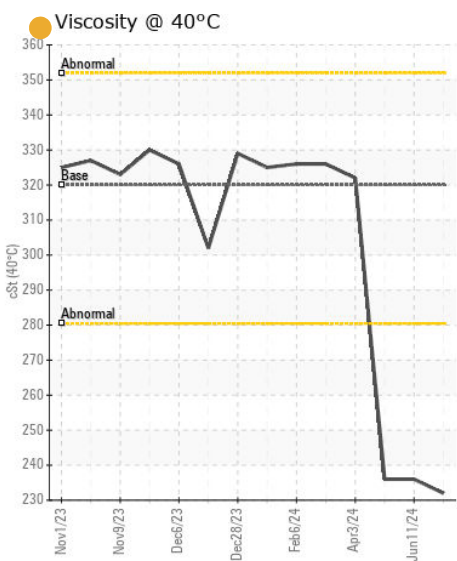
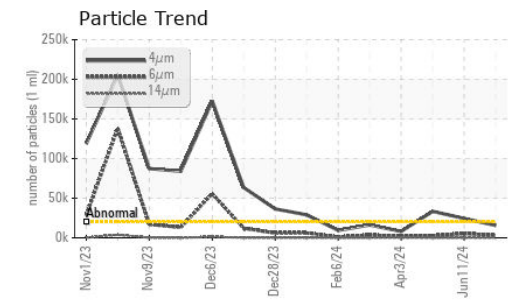
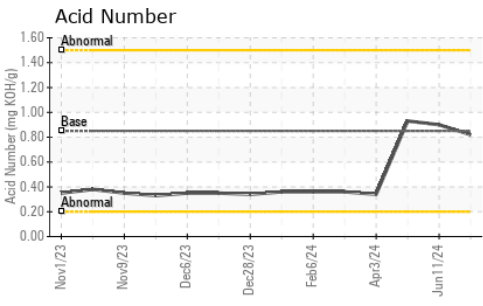
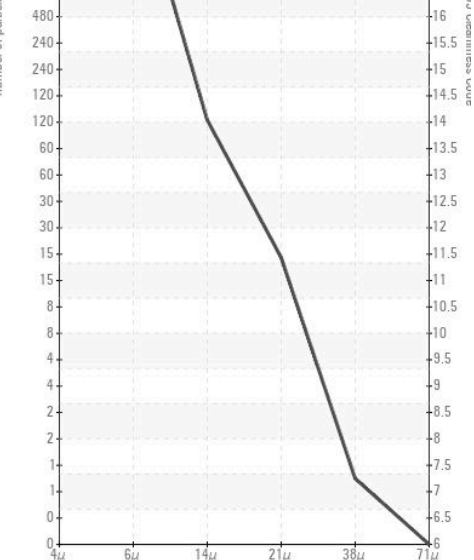
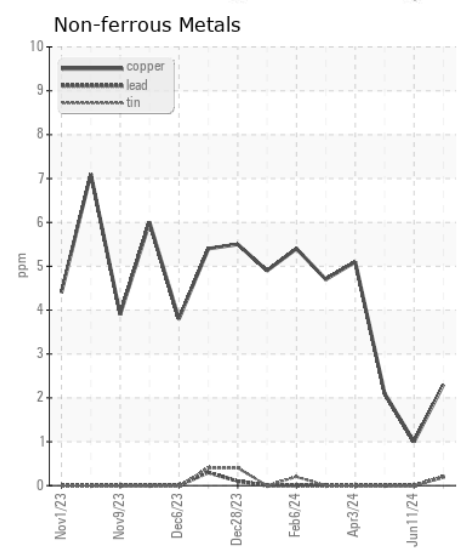
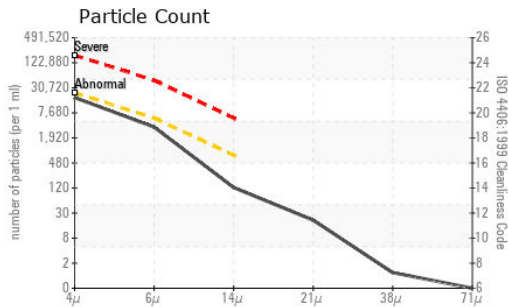
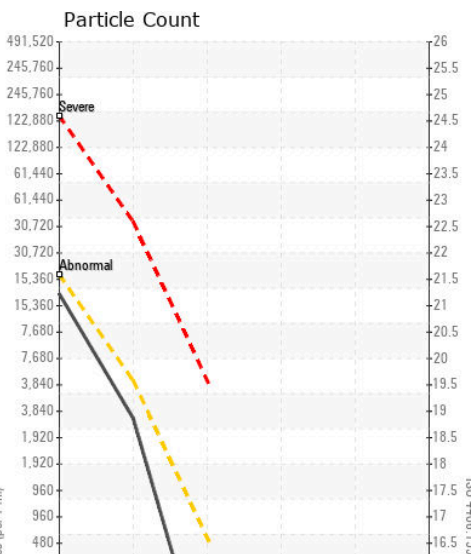
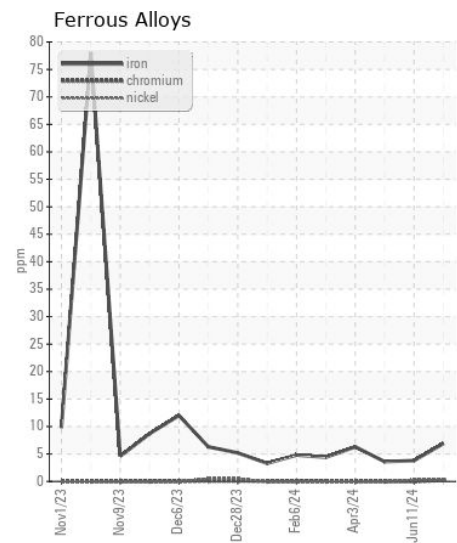
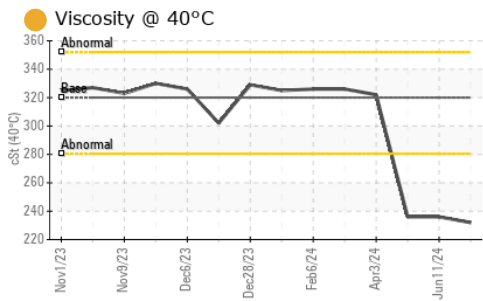
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>11</b>	10	8
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	4	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>15567</b>	24455	33377
Particles >6µm		ASTM D7647	>5000	<b>3051</b>	5498	2517
Particles >14µm		ASTM D7647	>640	<b>109</b>	75	37
Particles >21µm		ASTM D7647	>160	<b>18</b>	6	6
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/19/14</b>	22/20/13	22/19/12
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

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<b>0</b>	4	9
Boron	ppm	ASTM D5185m	50	<b>&lt;1</b>	3	0
Barium	ppm	ASTM D5185m	15	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	15	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	50	<b>4</b>	4	<1
Calcium	ppm	ASTM D5185m	50	<b>0</b>	14	8
Phosphorus	ppm	ASTM D5185m	350	<b>350</b>	396	358
Zinc	ppm	ASTM D5185m	100	<b>2</b>	9	8
Sulfur	ppm	ASTM D5185m	12500	<b>17099</b>	22494	18886
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	<b>0.82</b>	0.90	0.93
Visc @ 40°C	cSt	ASTM D445	320	<b>232</b>	236	236



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013627 **Received** : 15 Jul 2024  
**Lab Number** : 06235921 **Tested** : 16 Jul 2024  
**Unique Number** : 11124755 **Diagnosed** : 16 Jul 2024 - Don Baldridge  
**Test Package** : FLEET ( Additional Tests: PrtCount )

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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)