



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RIG 251
 Machine Id
R251-DW
 Component
Gearbox
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013953	KL0013952	---
Sample Date		Client Info		08 Jan 2024	03 Jan 2024	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	4	4	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	<1	---
Lead	ppm	ASTM D5185m	>50	0	0	---
Copper	ppm	ASTM D5185m	>200	0	0	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

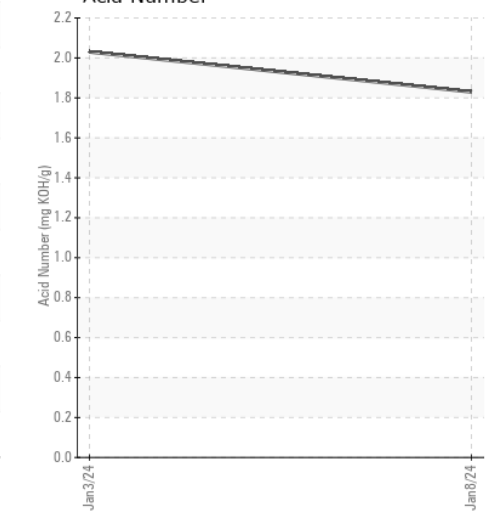
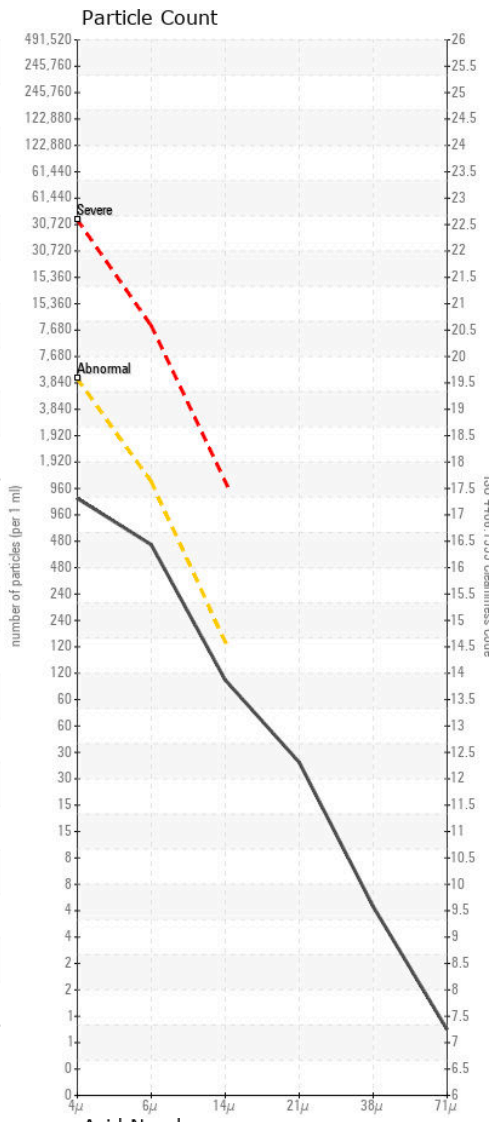
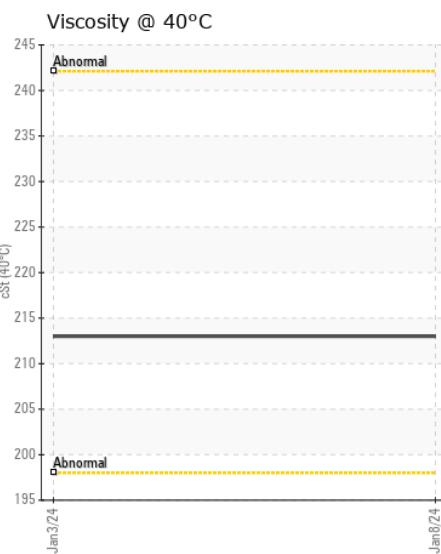
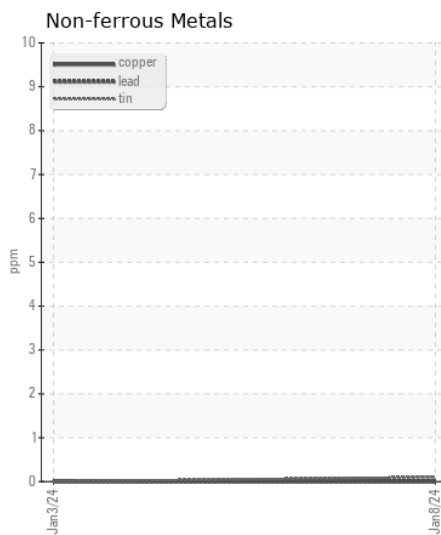
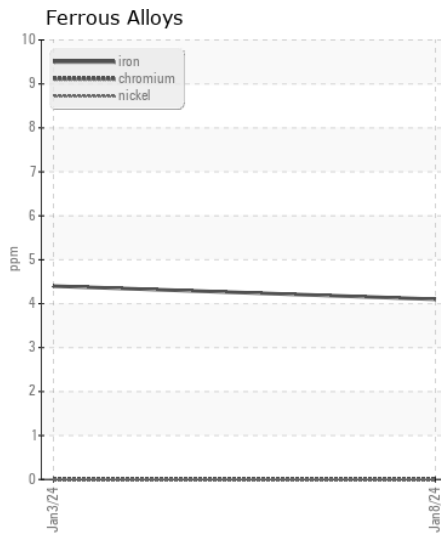
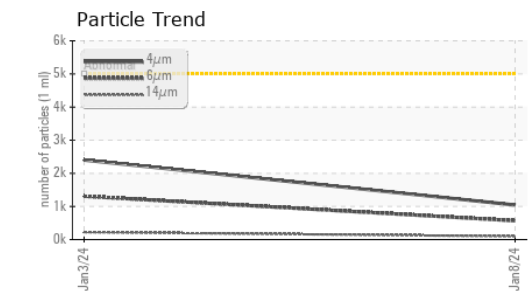
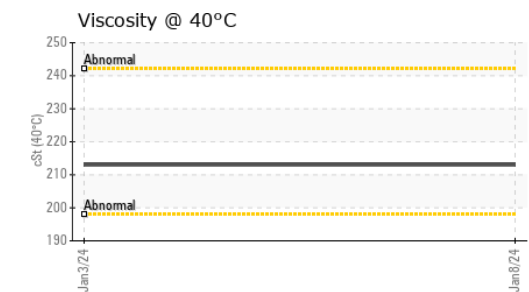
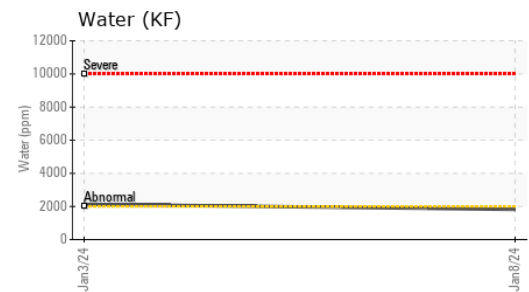
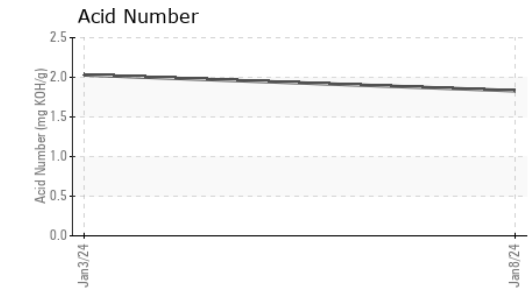
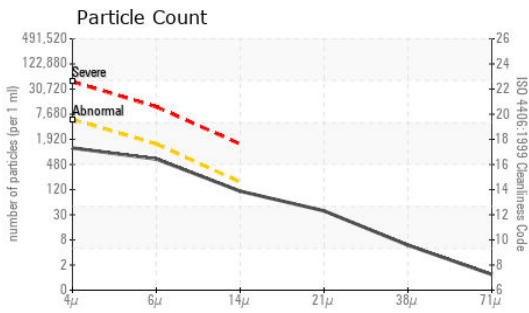
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	3	4	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Water	%	ASTM D6304	>0.2	0.182	▲ 0.213	---
ppm Water	ppm	ASTM D6304	>2000	1820	▲ 2130	---
Particles >4µm		ASTM D7647	>5000	1044	2401	---
Particles >6µm		ASTM D7647	>1300	569	▲ 1308	---
Particles >14µm		ASTM D7647	>160	97	▲ 223	---
Particles >21µm		ASTM D7647	>40	33	▲ 75	---
Particles >38µm		ASTM D7647	>10	5	▲ 12	---
Particles >71µm		ASTM D7647	>3	1	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/16/14	▲ 18/18/15	---
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	0.2%	0.2%	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		1	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		0	0	---
Calcium	ppm	ASTM D5185m		4	3	---
Phosphorus	ppm	ASTM D5185m		680	690	---
Zinc	ppm	ASTM D5185m		0	0	---
Sulfur	ppm	ASTM D5185m		1108	1090	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.83	2.03	---
Visc @ 40°C	cSt	ASTM D445		213	213	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013953 **Received** : 10 Jan 2024
Lab Number : 06056634 **Diagnosed** : 16 Jan 2024
Unique Number : 10822583 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, PrtCount)

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)

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