MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
RIG 251
Machine Id
R251-DW
Component
Gearbox
Fluid
GEAR OIL (PAG) ISO 220 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

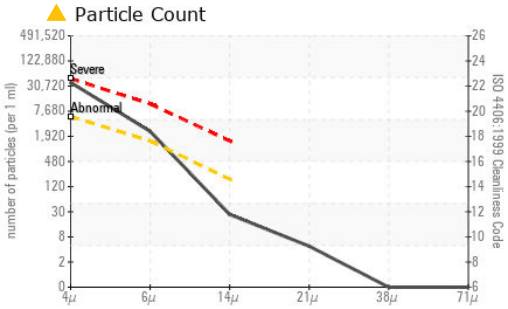
CONTAMINATION

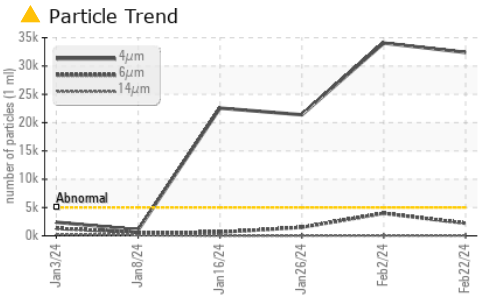
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

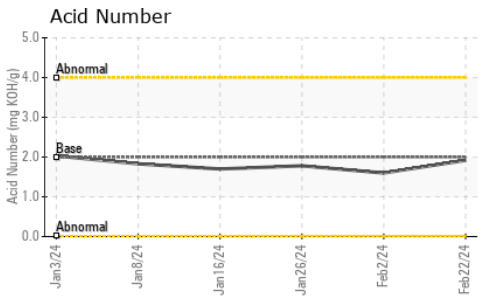
FLUID CONDITION

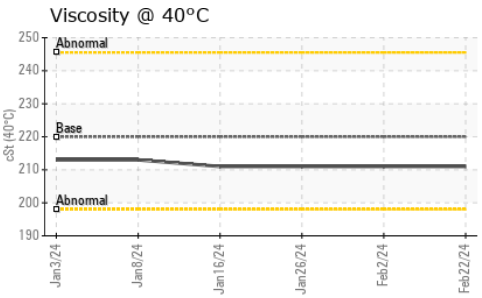
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

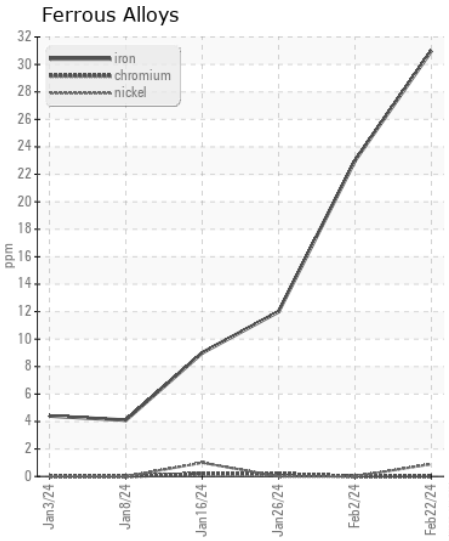
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013727	KL0013760	KL0013757
Sample Date		Client Info		22 Feb 2024	02 Feb 2024	26 Jan 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	31	23	12
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	2
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>200	<1	0	0
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	3	0	6
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 32398	▲ 34053	▲ 21385
Particles >6µm		ASTM D7647	>1300	● 2207	▲ 3973	● 1500
Particles >14µm		ASTM D7647	>160	23	39	31
Particles >21µm		ASTM D7647	>40	4	4	15
Particles >38µm		ASTM D7647	>10	0	0	6
Particles >71µm		ASTM D7647	>3	0	0	5
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/18/12	▲ 22/19/12	▲ 22/18/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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
Sodium	ppm	ASTM D5185m		2	1	0
Boron	ppm	ASTM D5185m	5	<1	0	0
Barium	ppm	ASTM D5185m	5	0	0	4
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	5	2	0	0
Calcium	ppm	ASTM D5185m	5	3	0	1
Phosphorus	ppm	ASTM D5185m	775	654	655	614
Zinc	ppm	ASTM D5185m	5	0	0	<1
Sulfur	ppm	ASTM D5185m	2000	1293	859	1053
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	1.92	1.60	1.78
Visc @ 40°C	cSt	ASTM D445	220	211	211	211

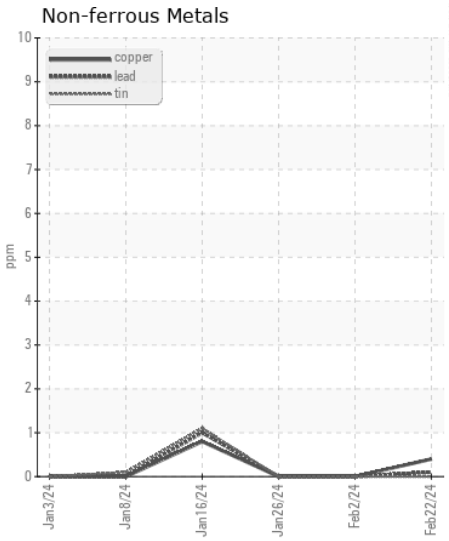


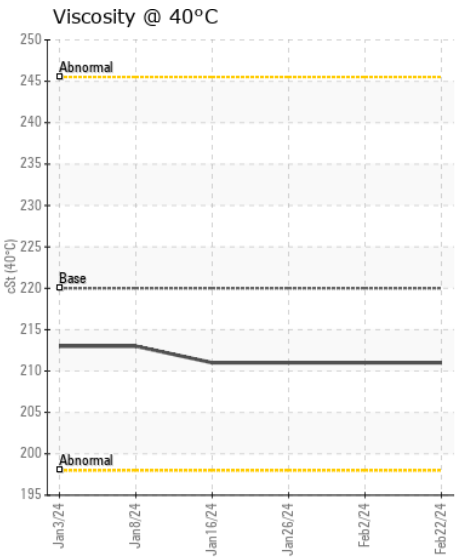


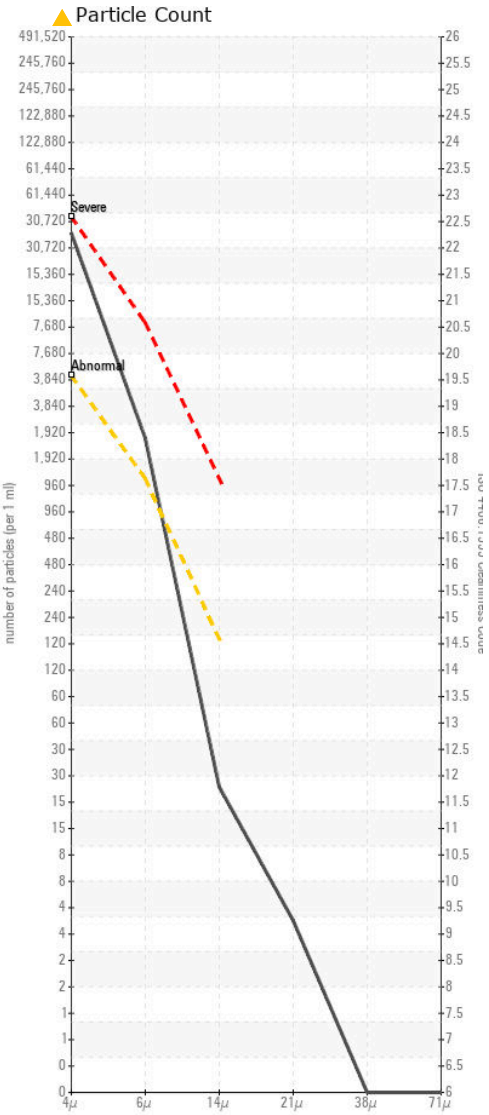


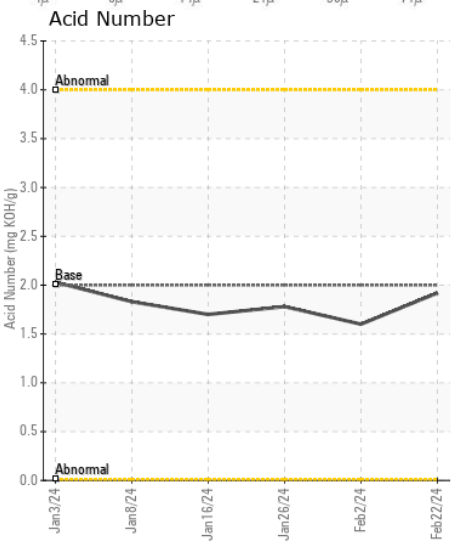












Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: KL0013727	**Received**	: 28 Feb 2024
Lab Number	: 06102936	**Tested**	: 29 Feb 2024
Unique Number	: 10901166	**Diagnosed**	: 29 Feb 2024 - Wes Davis
Test Package	: MOB 2 (Additional Tests: 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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