



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

RIG 813

Machine Id

R813-MP-02

Component

Gearbox

Fluid

GEAR OIL ISO 320 (--- 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. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

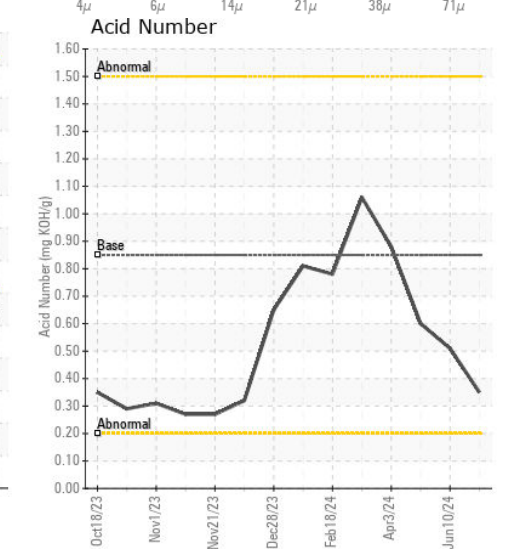
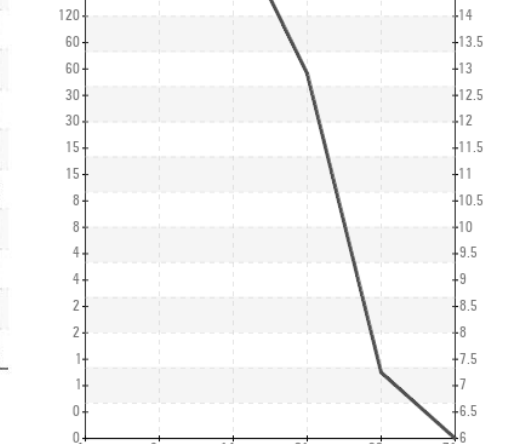
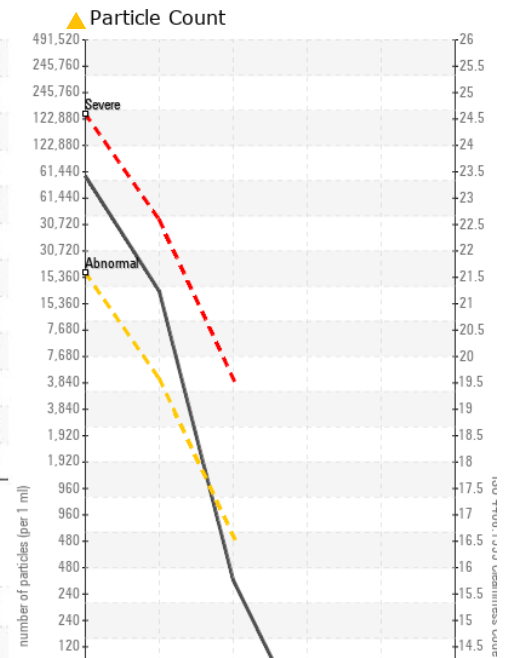
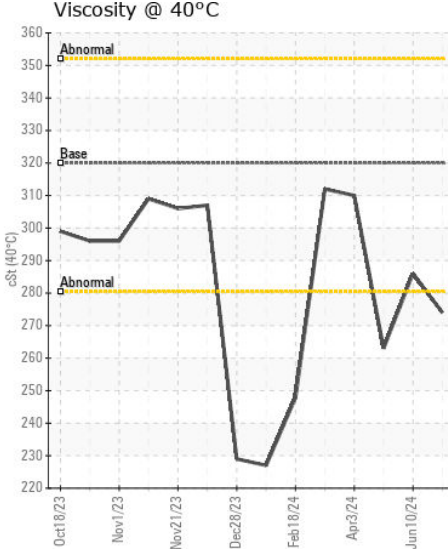
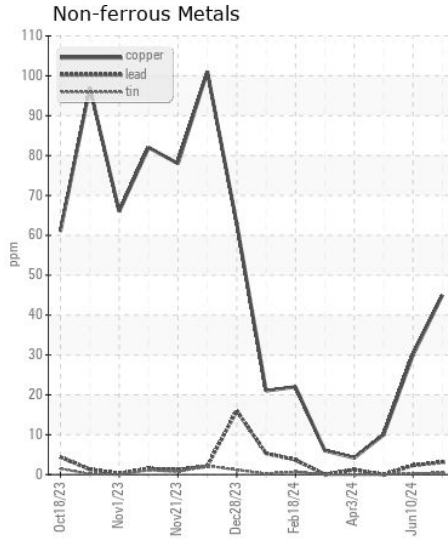
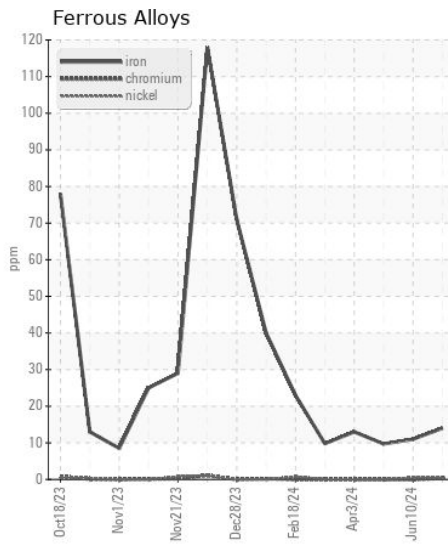
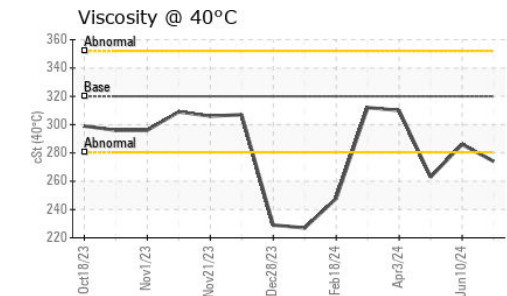
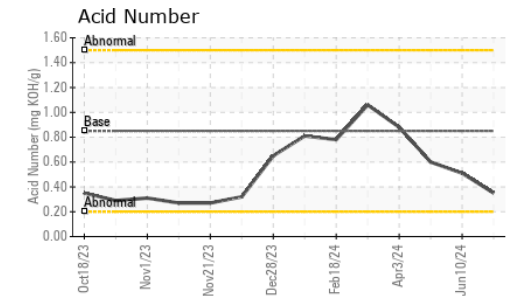
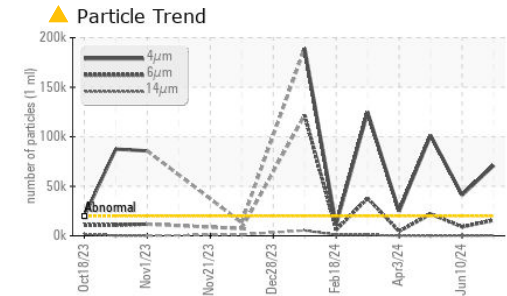
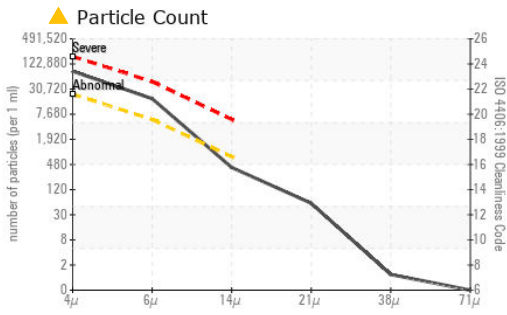
CONTAMINATION

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		KL0013624	KL0014482	KL0014285
Sample Date		Client Info		04 Jul 2024	10 Jun 2024	07 May 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	14	11	10
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	2	2
Lead	ppm	ASTM D5185m	>50	3	2	0
Copper	ppm	ASTM D5185m	>200	45	30	10
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	8	5	9
Potassium	ppm	ASTM D5185m	>20	1	4	2
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 70993	▲ 41096	▲ 101305
Particles >6µm		ASTM D7647	>5000	▲ 15715	● 9043	▲ 22054
Particles >14µm		ASTM D7647	>640	358	118	112
Particles >21µm		ASTM D7647	>160	50	14	16
Particles >38µm		ASTM D7647	>40	1	0	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 23/21/16	▲ 23/20/14	▲ 24/22/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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
Sodium	ppm	ASTM D5185m		2	3	12
Boron	ppm	ASTM D5185m	50	<1	4	2
Barium	ppm	ASTM D5185m	15	0	2	11
Molybdenum	ppm	ASTM D5185m	15	2	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	50	12	8	8
Calcium	ppm	ASTM D5185m	50	12	18	18
Phosphorus	ppm	ASTM D5185m	350	231	292	299
Zinc	ppm	ASTM D5185m	100	24	19	46
Sulfur	ppm	ASTM D5185m	12500	13150	20389	14779
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.35	0.51	0.60
Visc @ 40°C	cSt	ASTM D445	320	274	286	● 263



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013624 **Received** : 15 Jul 2024
Lab Number : 06235920 **Tested** : 16 Jul 2024
Unique Number : 11124754 **Diagnosed** : 16 Jul 2024 - Wes Davis
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)