



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
RIG 879
Machine Id
R879-MP-02
Component
Gearbox
Fluid
GEAR OIL ISO 320 (--- GAL)

RECOMMENDATION

The offline filter changed at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014471	KL0014319	KL0014302
Sample Date		Client Info		03 Jul 2024	07 May 2024	03 Apr 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	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	▲ 252	▲ 388	40
Chromium	ppm	ASTM D5185m	>10	2	4	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	9	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	● 154	<1
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>200	7	58	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

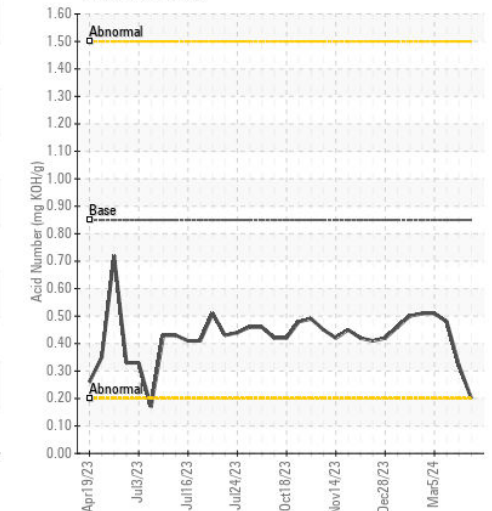
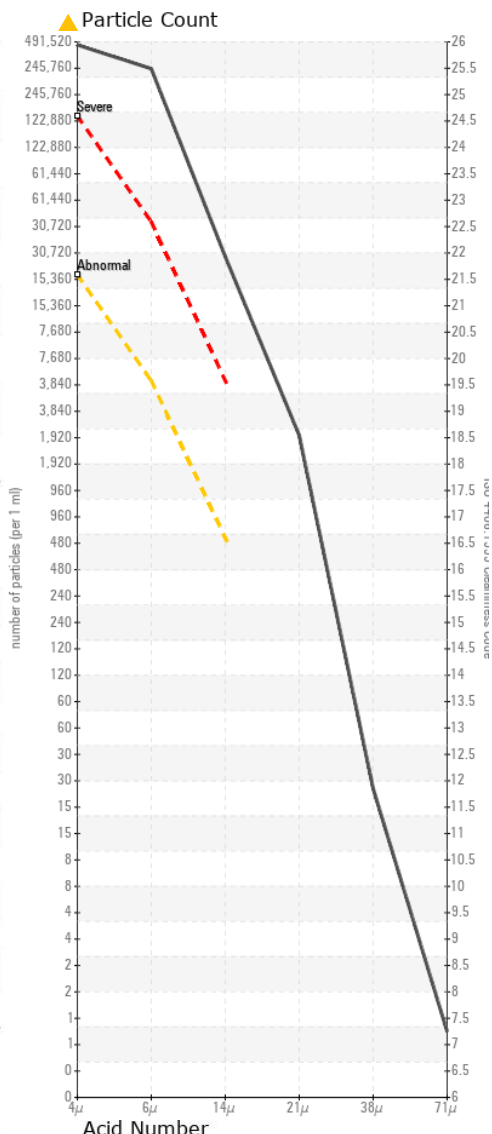
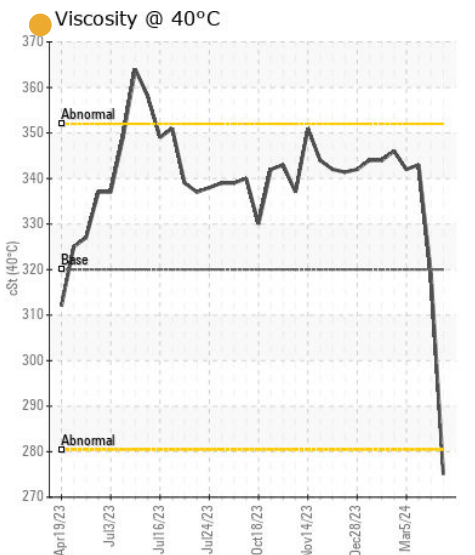
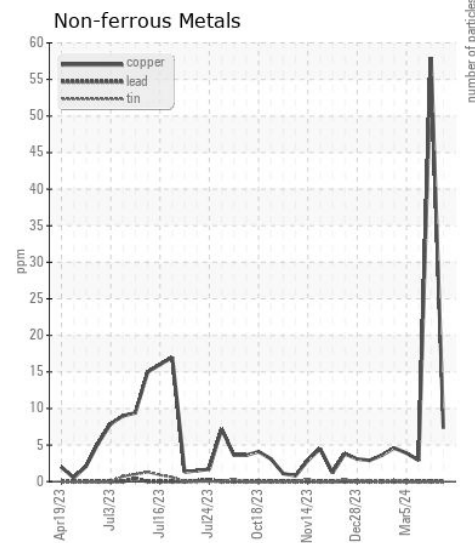
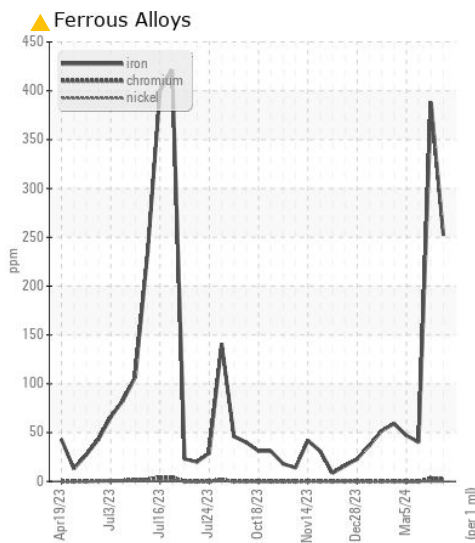
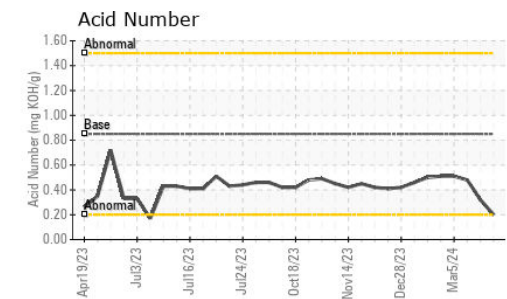
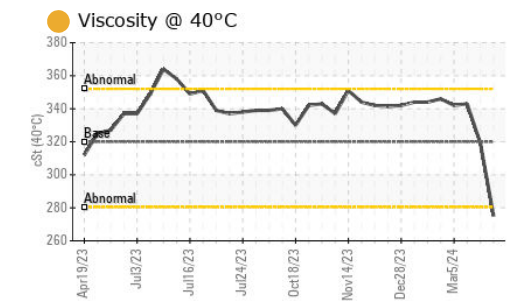
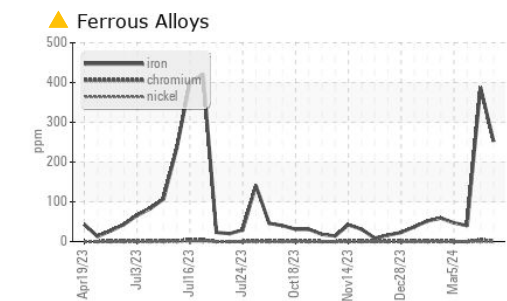
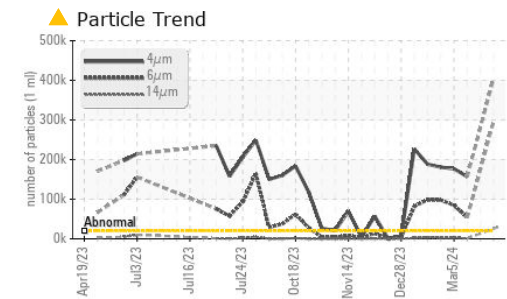
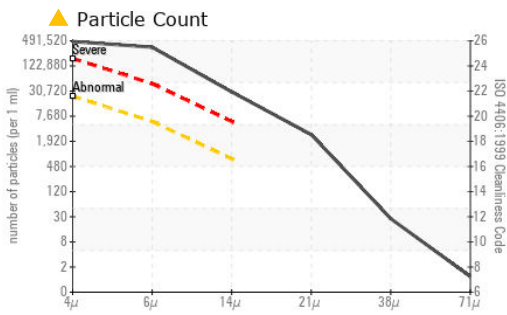
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>50	23	▲ 615	12
Potassium	ppm	ASTM D5185m	>20	3	61	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 405164	---	▲ 156838
Particles >6µm		ASTM D7647	>5000	▲ 296730	---	▲ 53519
Particles >14µm		ASTM D7647	>640	▲ 25394	---	▲ 909
Particles >21µm		ASTM D7647	>160	▲ 2445	---	▲ 144
Particles >38µm		ASTM D7647	>40	24	---	5
Particles >71µm		ASTM D7647	>10	1	---	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 26/25/22	---	▲ 24/23/17
Silt	scalar	*Visual	NONE	NONE	▲ MODER	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

FLUID CONDITION

The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		44	54	24
Boron	ppm	ASTM D5185m	50	2	12	4
Barium	ppm	ASTM D5185m	15	35	1251	5
Molybdenum	ppm	ASTM D5185m	15	<1	4	0
Manganese	ppm	ASTM D5185m		2	4	<1
Magnesium	ppm	ASTM D5185m	50	1	30	4
Calcium	ppm	ASTM D5185m	50	26	430	31
Phosphorus	ppm	ASTM D5185m	350	126	150	129
Zinc	ppm	ASTM D5185m	100	26	79	60
Sulfur	ppm	ASTM D5185m	12500	9867	10382	9849
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.20	0.32	0.48
Visc @ 40°C	cSt	ASTM D445	320	● 275	319	343



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014471 **Received** : 12 Jul 2024
Lab Number : 06234866 **Tested** : 15 Jul 2024
Unique Number : 11123700 **Diagnosed** : 15 Jul 2024 - Don Baldridge
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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