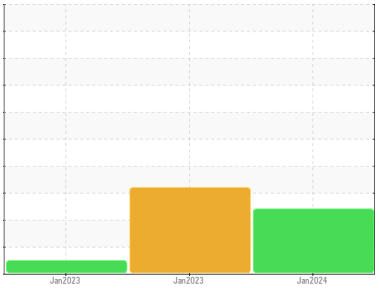
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
PLOGER
Machine Id
9212 - PLOGER
Component
Transmission (Manual)
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
The oil is near the end of it`s useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the fluid.

Fluid Condition
The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0900870**	WC0797107	WC0797108
Sample Date		Client Info		**03 Jan 2024**	21 Jan 2023	21 Jan 2023
Machine Age	mls	Client Info		**314792**	171913	171913
Oil Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**99**	81	14
Chromium	ppm	ASTM D5185m	>5	**1**	2	<1
Nickel	ppm	ASTM D5185m	>5	**<1**	2	2
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>7	**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>25	**23**	18	<1
Lead	ppm	ASTM D5185m	>45	**0**	2	0
Copper	ppm	ASTM D5185m	>225	**213**	▲ 178	6
Tin	ppm	ASTM D5185m	>10	**<1**	0	0
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**227**	217	5
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**1**	2	<1
Manganese	ppm	ASTM D5185m		**22**	22	2
Magnesium	ppm	ASTM D5185m		**0**	7	8
Calcium	ppm	ASTM D5185m		**215**	208	732
Phosphorus	ppm	ASTM D5185m		**1270**	1139	591
Zinc	ppm	ASTM D5185m		**12**	13	0
Sulfur	ppm	ASTM D5185m		**1050**	902	3495

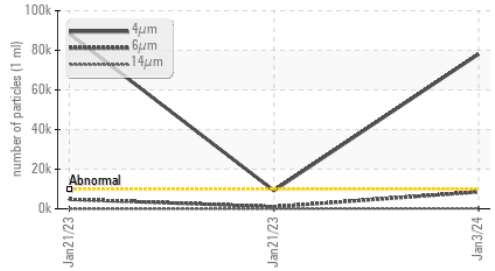
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	**8**	11	21
Sodium	ppm	ASTM D5185m		**0**	2	<1
Potassium	ppm	ASTM D5185m	>20	**0**	2	1
Water	%	ASTM D6304	>0.1	**0.059**	0.053	0.016
ppm Water	ppm	ASTM D6304	>1000	**597**	534.2	166.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **78113**	▲ 88413	9196
Particles >6µm		ASTM D7647	>2500	▲ **8538**	● 4786	1046
Particles >14µm		ASTM D7647	>320	**204**	30	26
Particles >21µm		ASTM D7647	>80	**35**	9	5
Particles >38µm		ASTM D7647	>20	**1**	0	0
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/20/15**	▲ 24/19/12	20/17/12

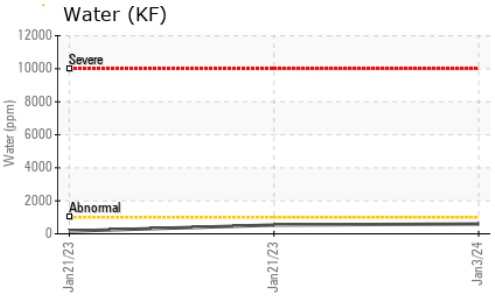
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **4.23**	▲ 3.47	0.39

OIL ANALYSIS REPORT

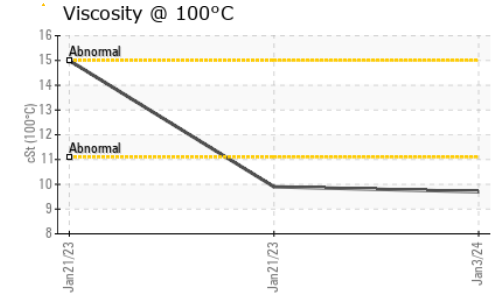
Particle Trend



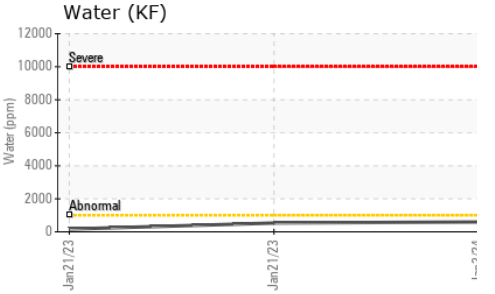
Water (KF)



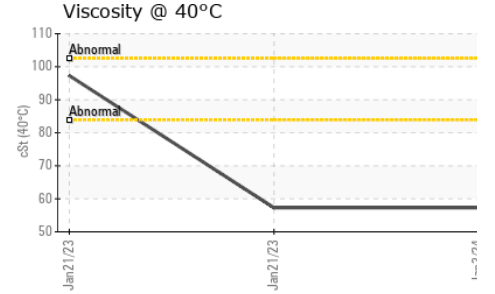
Viscosity @ 100°C



Water (KF)

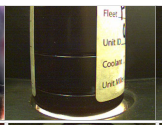
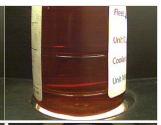
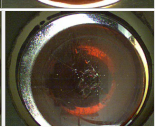


Viscosity @ 40°C



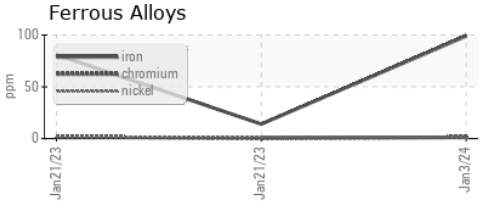
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**57.3**	57.3	97.3
Visc @ 100°C	cSt	ASTM D445		**9.7**	9.9	15.0
Viscosity Index (VI)	Scale	ASTM D2270		**154**	159	161

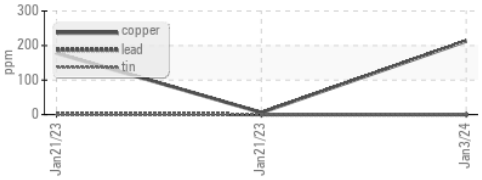
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

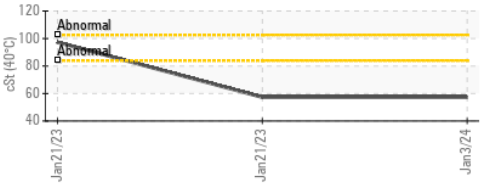
Ferrous Alloys



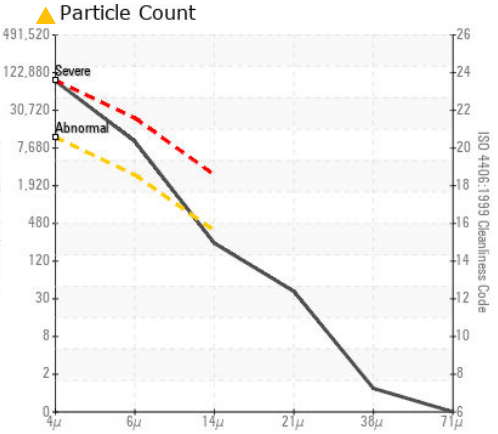
Non-ferrous Metals



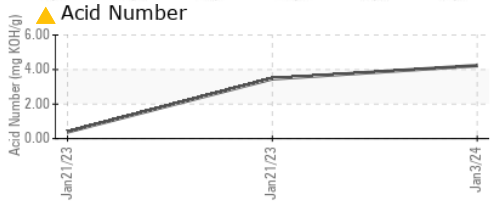
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900870 **Received** : 19 Mar 2024
Lab Number : 06123127 **Tested** : 22 Mar 2024
Unique Number : 10937278 **Diagnosed** : 22 Mar 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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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