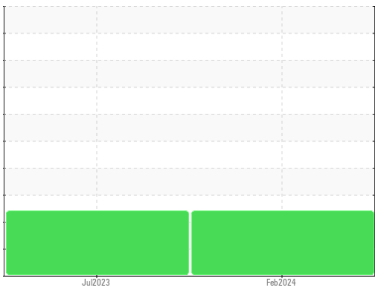
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
DICK LAVY
Machine Id
DICK LAVY 4956
Component
Rear Differential
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
The oil is near the end of it`s useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

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		**WC0900809**	WC0843213	---
Sample Date		Client Info		**09 Feb 2024**	28 Jul 2023	---
Machine Age	mls	Client Info		**56758**	456	---
Oil Age	mls	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**89**	37	---
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	---
Nickel	ppm	ASTM D5185m	>10	**2**	0	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>25	**2**	3	---
Lead	ppm	ASTM D5185m	>25	**<1**	0	---
Copper	ppm	ASTM D5185m	>100	**1**	0	---
Tin	ppm	ASTM D5185m	>10	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**182**	194	---
Barium	ppm	ASTM D5185m		**<1**	0	---
Molybdenum	ppm	ASTM D5185m		**<1**	0	---
Manganese	ppm	ASTM D5185m		**3**	2	---
Magnesium	ppm	ASTM D5185m		**6**	<1	---
Calcium	ppm	ASTM D5185m		**21**	14	---
Phosphorus	ppm	ASTM D5185m		**1179**	1104	---
Zinc	ppm	ASTM D5185m		**8**	0	---
Sulfur	ppm	ASTM D5185m		**28707**	29741	---

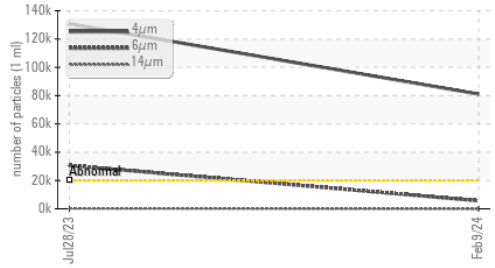
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**21**	17	---
Sodium	ppm	ASTM D5185m		**8**	4	---
Potassium	ppm	ASTM D5185m	>20	**3**	2	---
Water	%	ASTM D6304	>.2	**0.030**	0.066	---
ppm Water	ppm	ASTM D6304	>2000	**305**	666.8	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **81101**	▲ 130728	---
Particles >6µm		ASTM D7647	>5000	● **5660**	▲ 30661	---
Particles >14µm		ASTM D7647	>640	**10**	253	---
Particles >21µm		ASTM D7647	>160	**2**	30	---
Particles >38µm		ASTM D7647	>40	**0**	0	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/20/10**	▲ 24/22/15	---

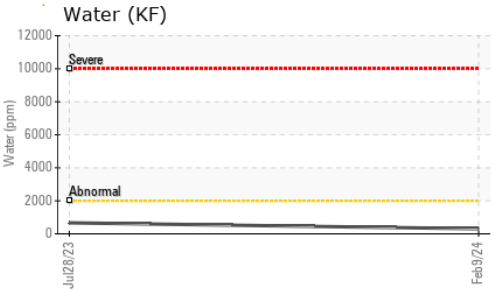
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **3.77**	● 3.47	---

OIL ANALYSIS REPORT

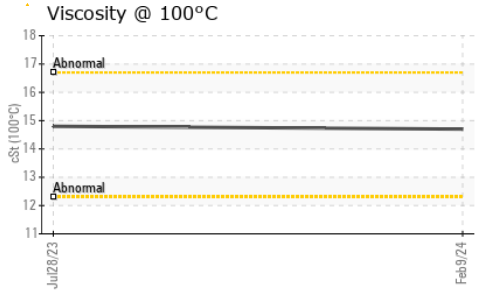
Particle Trend



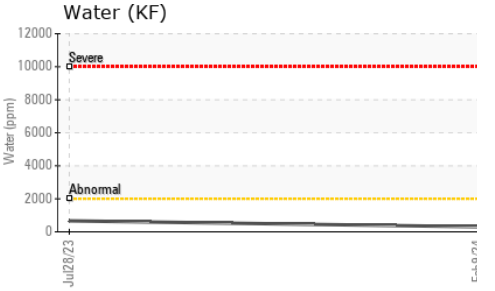
Water (KF)



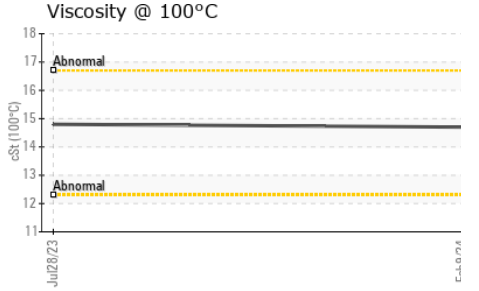
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°C



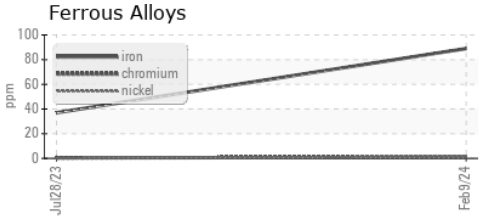
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**LIGHT**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>.2	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**97.5**	98.7	---
Visc @ 100°C	cSt	ASTM D445		**14.7**	14.8	---
Viscosity Index (VI)	Scale	ASTM D2270		**157**	156	---

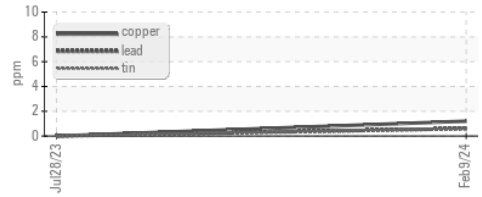
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

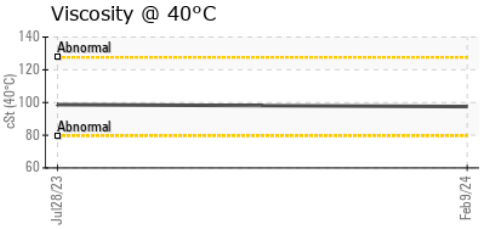
Ferrous Alloys



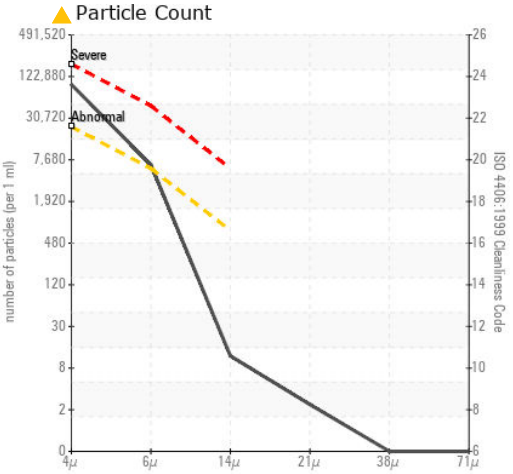
Non-ferrous Metals



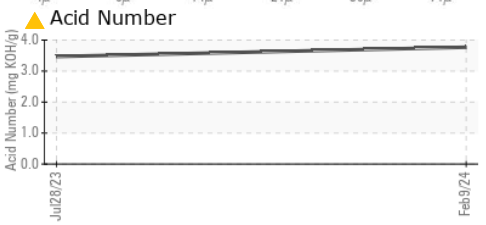
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900809 **Received** : 12 Apr 2024
Lab Number : 06148062 **Tested** : 15 Apr 2024
Unique Number : 10978140 **Diagnosed** : 17 Apr 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

Certificate L2367

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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