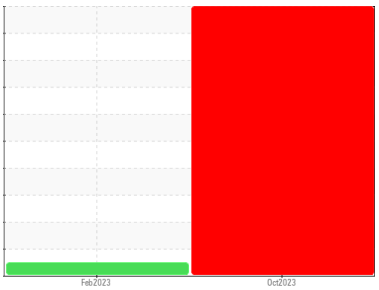
PROBLEM SUMMARY

Sample Rating Trend

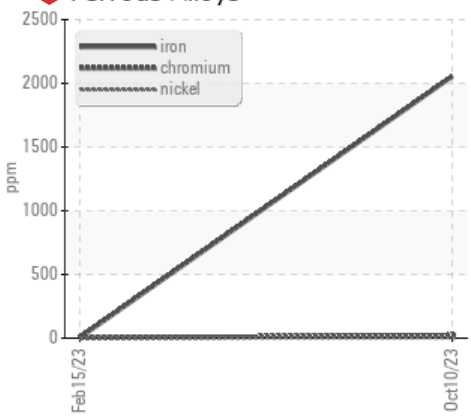


WEAR

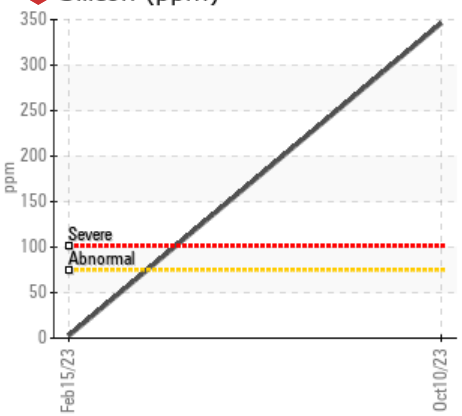
Area
[19661]
Machine Id
40-201
Component
Left Final Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

COMPONENT CONDITION SUMMARY

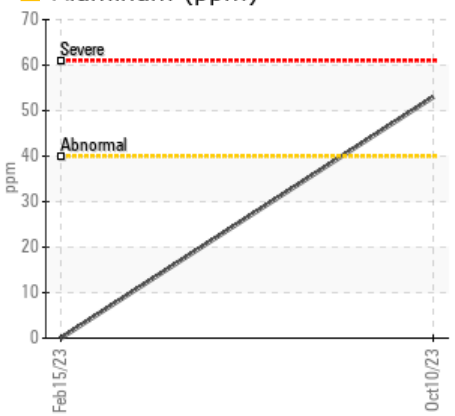
Ferrous Alloys



Silicon (ppm)



Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	---
Iron	ppm	ASTM D5185m	>750	2054	3	---
Chromium	ppm	ASTM D5185m	>9	24	<1	---
Aluminum	ppm	ASTM D5185m	>40	53	0	---
Silicon	ppm	ASTM D5185m	>75	346	2	---

Customer Id: MANTUL
Sample No.: WC0818754
Lab Number: 06010408
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

15 Feb 2023 Diag: Don Baldridge

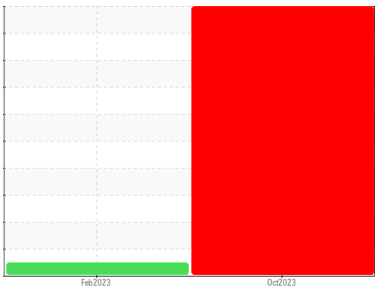
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
[19661]
Machine Id
40-201
Component
Left Final Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0818754**	WC0754845	---
Sample Date		Client Info		**10 Oct 2023**	15 Feb 2023	---
Machine Age	hrs	Client Info		**2122**	1602	---
Oil Age	hrs	Client Info		**1122**	478	---
Oil Changed		Client Info		**Changed**	Not Changd	---
Sample Status				**SEVERE**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>750	**2054**	3	---
Chromium	ppm	ASTM D5185m	>9	**24**	<1	---
Nickel	ppm	ASTM D5185m	>10	**3**	<1	---
Titanium	ppm	ASTM D5185m		**5**	0	---
Silver	ppm	ASTM D5185m		**0**	<1	---
Aluminum	ppm	ASTM D5185m	>40	**53**	0	---
Lead	ppm	ASTM D5185m	>15	**<1**	0	---
Copper	ppm	ASTM D5185m	>40	**1**	0	---
Tin	ppm	ASTM D5185m	>10	**0**	<1	---
Vanadium	ppm	ASTM D5185m		**<1**	1	---
Cadmium	ppm	ASTM D5185m		**0**	<1	---

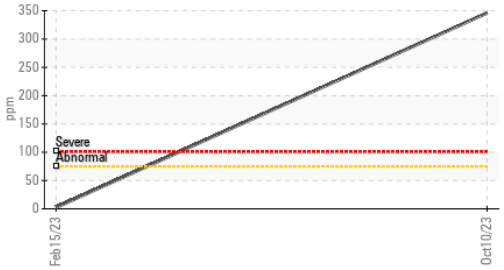
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	**<1**	23	---
Barium	ppm	ASTM D5185m	200	**5**	0	---
Molybdenum	ppm	ASTM D5185m	12	**<1**	0	---
Manganese	ppm	ASTM D5185m		**21**	<1	---
Magnesium	ppm	ASTM D5185m	12	**8**	<1	---
Calcium	ppm	ASTM D5185m	150	**122**	3	---
Phosphorus	ppm	ASTM D5185m	1650	**252**	87	---
Zinc	ppm	ASTM D5185m	125	**27**	<1	---
Sulfur	ppm	ASTM D5185m	22500	**20989**	7849	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**346**	2	---
Sodium	ppm	ASTM D5185m	>170	**32**	28	---
Potassium	ppm	ASTM D5185m	>20	**16**	10	---
Water	%	ASTM D6304	>0.075	**0.120**	NEG	---
ppm Water	ppm	ASTM D6304	>750	**1200**	---	---

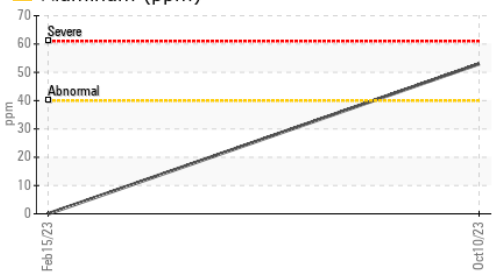
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	MODER	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.075	**0.2%**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

OIL ANALYSIS REPORT

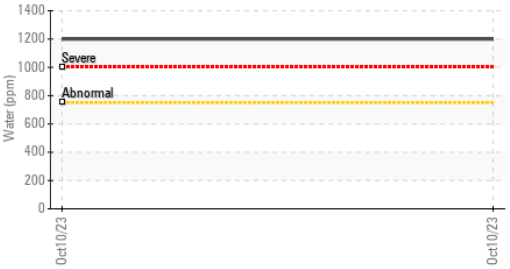
Silicon (ppm)



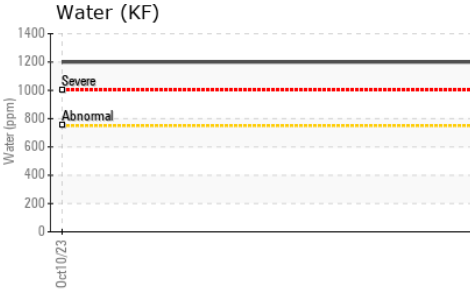
Aluminum (ppm)



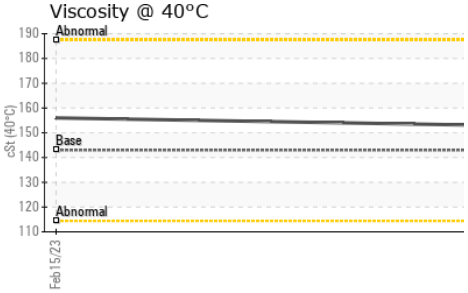
Water (KF)



Water (KF)



Viscosity @ 40°C

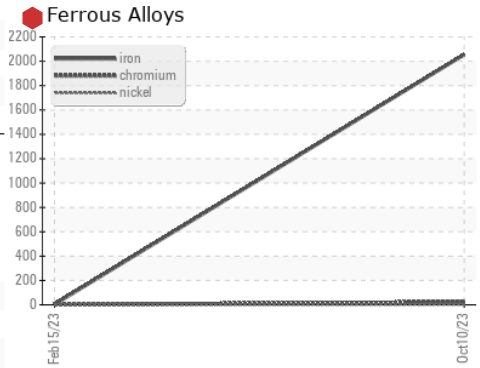


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	143	**153**	156	---

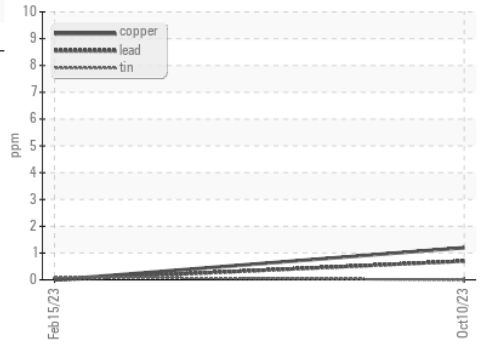
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

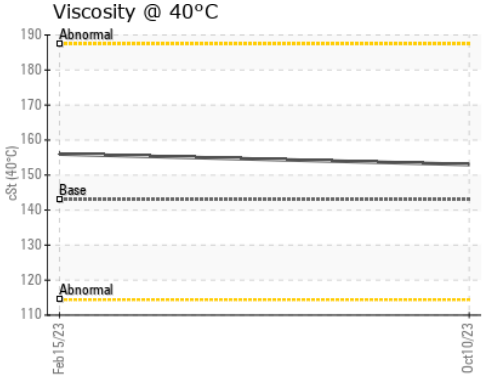
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0818754 **Received** : 16 Nov 2023
Lab Number : 06010408 **Diagnosed** : 20 Nov 2023
Unique Number : 10749552 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: KF)

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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