

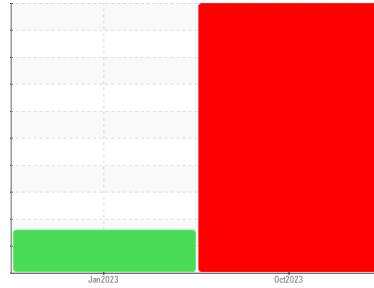


PROBLEM SUMMARY



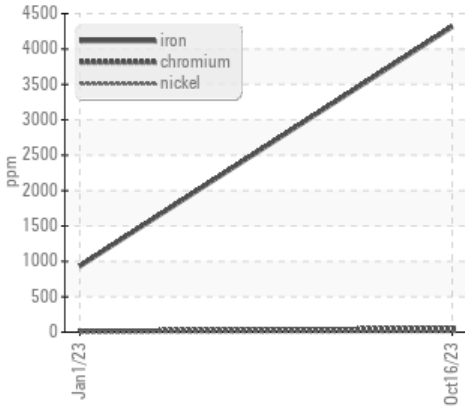
Area
[19813]
 Machine Id
52-158
 Component
Left Final Drive
 Fluid
synthetic 80w-90 (--- GAL)

Sample Rating Trend

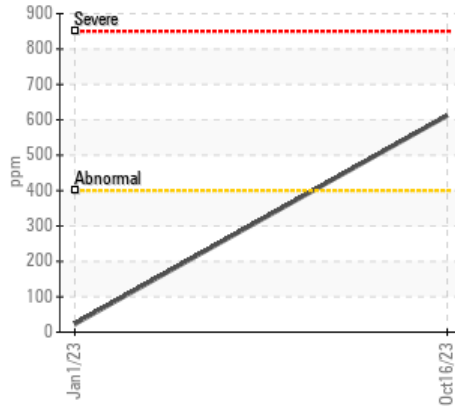


COMPONENT CONDITION SUMMARY

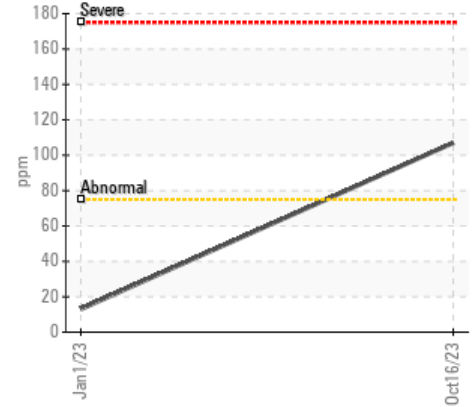
Ferrous Alloys



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. (Customer Sample Comment: Synthetic 80w/90 gear oil)

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Iron	ppm	ASTM D5185m	>800	4313	931	---
Chromium	ppm	ASTM D5185m	>10	53	13	---
Nickel	ppm	ASTM D5185m	>5	8	2	---
Aluminum	ppm	ASTM D5185m	>75	107	13	---
Silicon	ppm	ASTM D5185m	>400	612	23	---

Customer Id: MANTUL
 Sample No.: WC0818790
 Lab Number: 06010417
 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

01 Jan 2023 Diag: Don Baldrige

WEAR



The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report





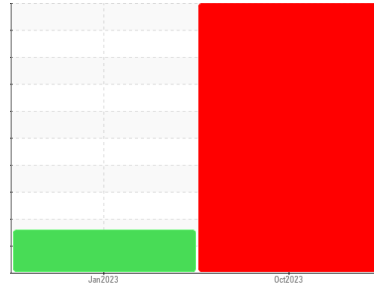
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
[19813]
 Machine Id
52-158
 Component
Left Final Drive
 Fluid
synthetic 80w-90 (--- 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. (Customer Sample Comment: Synthetic 80w/90 gear oil)

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0818790	WC0754782	---
Sample Date	Client Info		16 Oct 2023	01 Jan 2023	---
Machine Age	hrs	Client Info	1003	532	---
Oil Age	hrs	Client Info	1003	532	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			SEVERE	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	4313	931	---
Chromium	ppm	ASTM D5185m >10	53	13	---
Nickel	ppm	ASTM D5185m >5	8	2	---
Titanium	ppm	ASTM D5185m >15	9	<1	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >75	107	13	---
Lead	ppm	ASTM D5185m >10	<1	<1	---
Copper	ppm	ASTM D5185m >75	14	8	---
Tin	ppm	ASTM D5185m >8	0	<1	---
Vanadium	ppm	ASTM D5185m	<1	<1	---
Cadmium	ppm	ASTM D5185m	<1	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	422	144	---
Barium	ppm	ASTM D5185m	8	15	---
Molybdenum	ppm	ASTM D5185m	3	<1	---
Manganese	ppm	ASTM D5185m	36	9	---
Magnesium	ppm	ASTM D5185m	23	33	---
Calcium	ppm	ASTM D5185m	183	44	---
Phosphorus	ppm	ASTM D5185m	1435	1258	---
Zinc	ppm	ASTM D5185m	48	114	---
Sulfur	ppm	ASTM D5185m	24336	25056	---

CONTAMINANTS

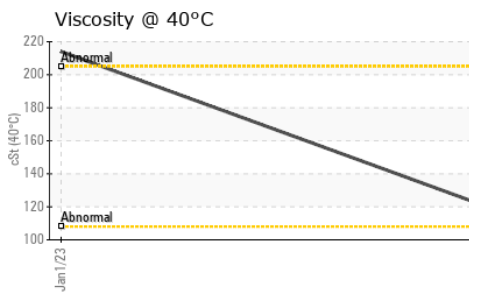
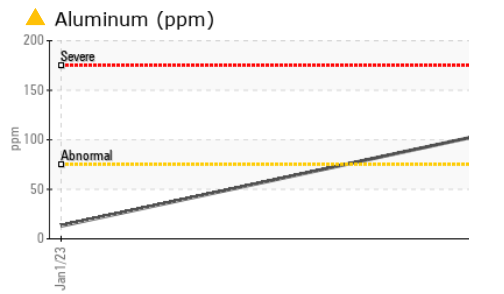
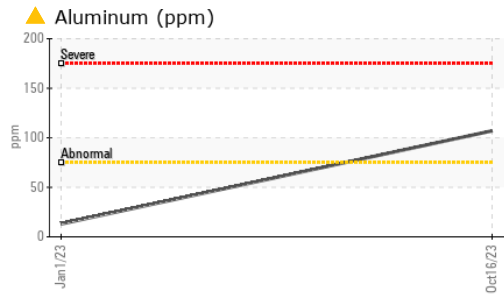
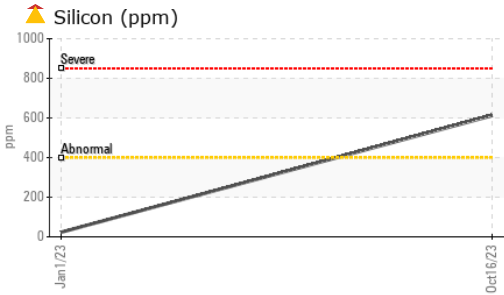
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	612	23	---
Sodium	ppm	ASTM D5185m	16	21	---
Potassium	ppm	ASTM D5185m >20	37	12	---

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	NONE	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 >0.2	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---



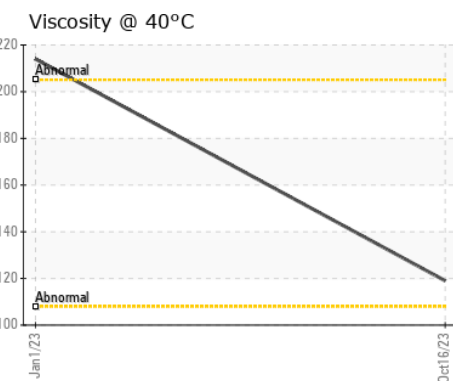
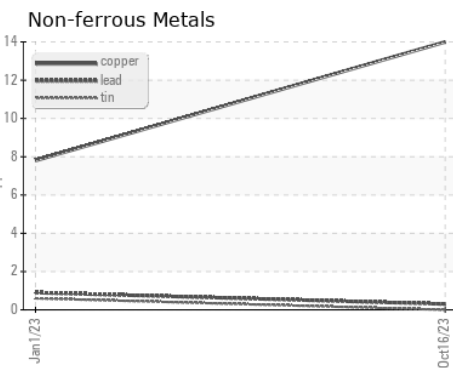
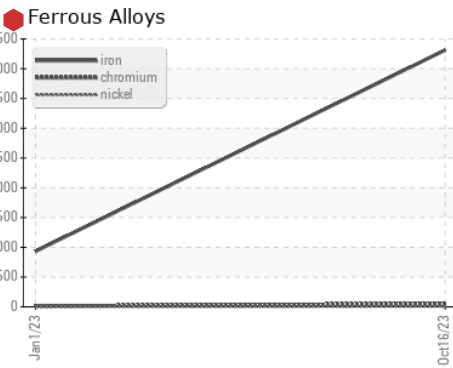
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	119	214	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0818790 **Received** : 16 Nov 2023
Lab Number : **06010417** **Diagnosed** : 20 Nov 2023
Unique Number : 10749561 **Diagnostician** : Sean Felton
Test Package : CONST

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 US 74146
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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)