



# PROBLEM SUMMARY

Sample Rating Trend

WEAR



Machine Id  
**424048**  
Component  
**Rear Differential**  
Fluid  
**GEAR OIL SAE 80W90 (--- LTR)**



## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time.  
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>870	▲ 1011	---	---
Nickel	ppm	ASTM D5185m	>25	▲ 25	---	---

Customer Id: GFL152  
Sample No.: GFL0082040  
Lab Number: 05864688  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS



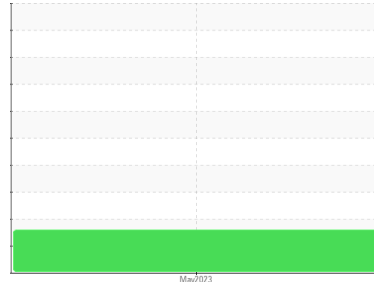
# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Machine Id  
**424048**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- LTR)**



## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

Gear wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0082040</b>	---	---
Sample Date	Client Info	<b>30 May 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >870	<b>▲ 1011</b>	---
Chromium	ppm	ASTM D5185m >8	<b>7</b>	---
Nickel	ppm	ASTM D5185m >25	<b>▲ 25</b>	---
Titanium	ppm	ASTM D5185m >4	<b>1</b>	---
Silver	ppm	ASTM D5185m	<b>0</b>	---
Aluminum	ppm	ASTM D5185m >40	<b>10</b>	---
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m >60	<b>5</b>	---
Tin	ppm	ASTM D5185m >5	<b>0</b>	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>68</b>	---
Barium	ppm	ASTM D5185m 200	<b>4</b>	---
Molybdenum	ppm	ASTM D5185m 12	<b>4</b>	---
Manganese	ppm	ASTM D5185m	<b>11</b>	---
Magnesium	ppm	ASTM D5185m 12	<b>30</b>	---
Calcium	ppm	ASTM D5185m 150	<b>152</b>	---
Phosphorus	ppm	ASTM D5185m 1650	<b>799</b>	---
Zinc	ppm	ASTM D5185m 125	<b>118</b>	---
Sulfur	ppm	ASTM D5185m 22500	<b>18873</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >285	<b>212</b>	---
Sodium	ppm	ASTM D5185m >170	<b>1</b>	---
Potassium	ppm	ASTM D5185m >20	<b>6</b>	---

## VISUAL

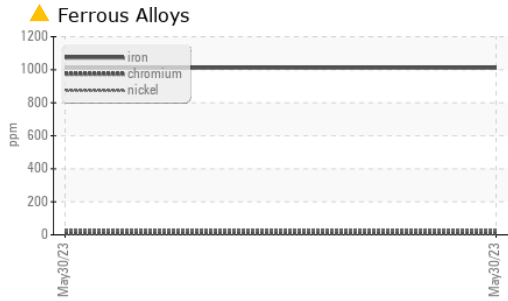
method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>MODER</b>	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual NONE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

## FLUID PROPERTIES

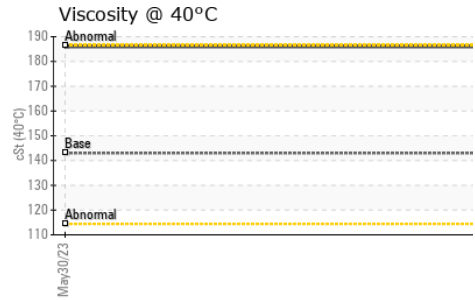
method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 143	<b>186</b>	---



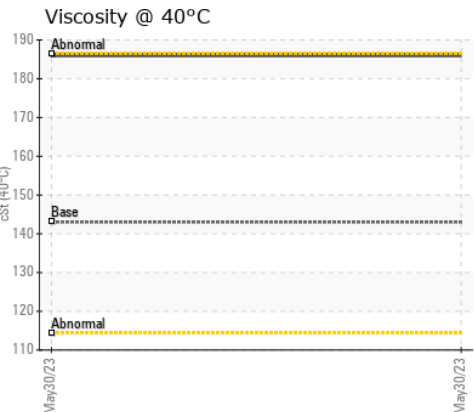
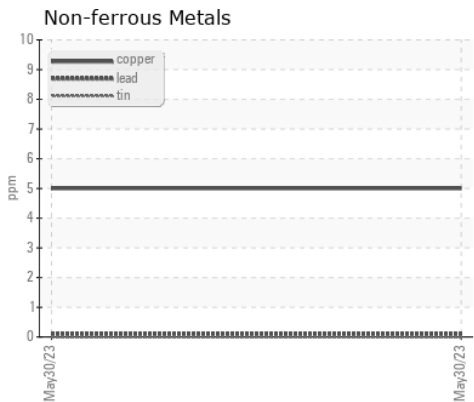
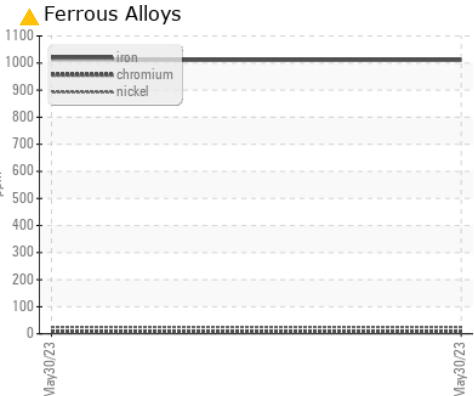
# OIL ANALYSIS REPORT



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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0082040    **Received** : 05 Jun 2023  
**Lab Number** : 05864688    **Diagnosed** : 07 Jun 2023  
**Unique Number** : 10499153    **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 152 - Jacksonville**  
 7580 PHILIPS HWY  
 Jacksonville, FL  
 US 32256  
 Contact: Chris Smith  
 chris.smith@gflenv.com  
 T: (904)252-0013  
 F:

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)