



# PROBLEM SUMMARY



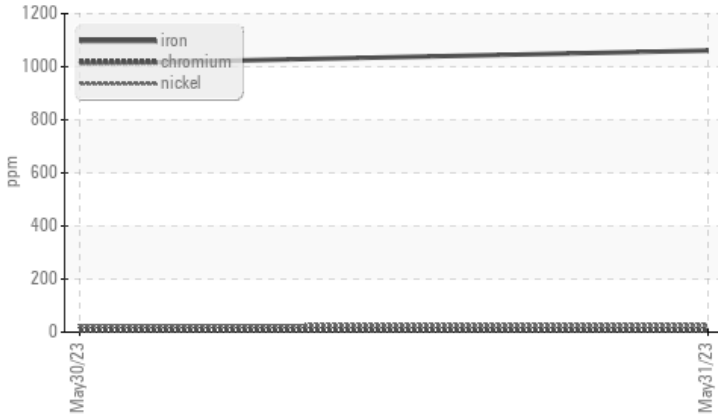
Machine Id  
**424048**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- LTR)**

Sample Rating Trend



## 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	ABNORMAL	---
Iron	ppm	ASTM D5185m	>870	▲ 1061	▲ 1011	---
Nickel	ppm	ASTM D5185m	>25	▲ 27	▲ 25	---

Customer Id: GFL152  
 Sample No.: GFL0082031  
 Lab Number: 05864689  
 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

**30 May 2023 Diag: Don Baldrige**

### WEAR



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



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>GFL0082031</b>	GFL0082040	---
Sample Date	Client Info	<b>31 May 2023</b>	30 May 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >870	<b>▲ 1061</b>	▲ 1011
Chromium	ppm	ASTM D5185m >8	<b>7</b>	7
Nickel	ppm	ASTM D5185m >25	<b>▲ 27</b>	▲ 25
Titanium	ppm	ASTM D5185m >4	<b>1</b>	1
Silver	ppm	ASTM D5185m	<b>0</b>	0
Aluminum	ppm	ASTM D5185m >40	<b>10</b>	10
Lead	ppm	ASTM D5185m >25	<b>0</b>	<1
Copper	ppm	ASTM D5185m >60	<b>4</b>	5
Tin	ppm	ASTM D5185m >5	<b>0</b>	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	<b>71</b>	68
Barium	ppm	ASTM D5185m 200	<b>4</b>	4
Molybdenum	ppm	ASTM D5185m 12	<b>2</b>	4
Manganese	ppm	ASTM D5185m	<b>11</b>	11
Magnesium	ppm	ASTM D5185m 12	<b>3</b>	30
Calcium	ppm	ASTM D5185m 150	<b>88</b>	152
Phosphorus	ppm	ASTM D5185m 1650	<b>798</b>	799
Zinc	ppm	ASTM D5185m 125	<b>76</b>	118
Sulfur	ppm	ASTM D5185m 22500	<b>20114</b>	18873

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >285	<b>223</b>	212
Sodium	ppm	ASTM D5185m >170	<b>&lt;1</b>	1
Potassium	ppm	ASTM D5185m >20	<b>6</b>	6

## VISUAL

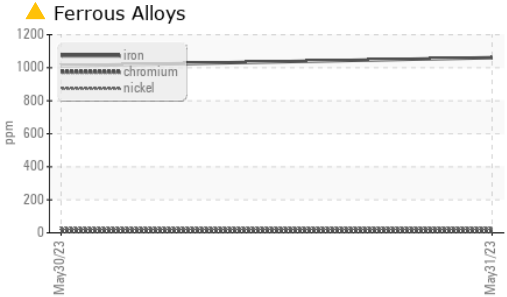
method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>MODER</b>	MODER
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual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

## FLUID PROPERTIES

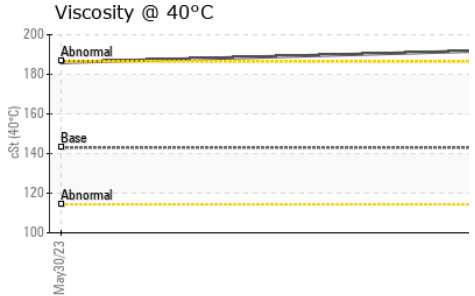
method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 143	<b>192</b>	186



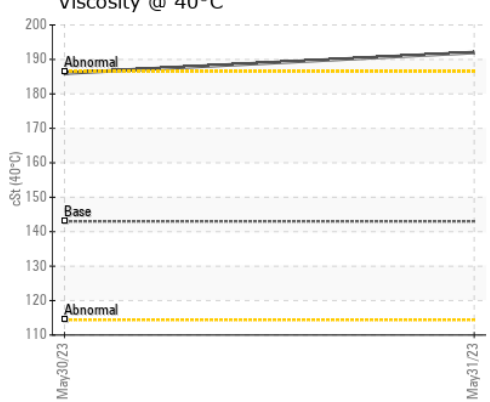
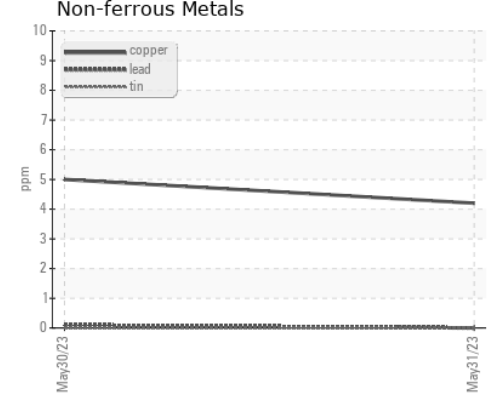
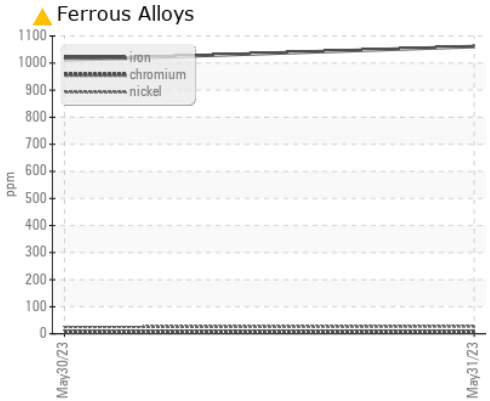
# OIL ANALYSIS REPORT



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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0082031 **Received** : 05 Jun 2023  
**Lab Number** : **05864689** **Diagnosed** : 07 Jun 2023  
**Unique Number** : 10499154 **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:

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)