



# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id  
**WL0415**

Component  
**Rear Right Wheel Hub**

Fluid  
**GEAR OIL LS 80W90 (--- GAL)**



## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

### Wear

Lead ppm levels are severe. Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### 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		<b>GFL0088317</b>	---	---
Sample Date	Client Info		<b>12 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>5138</b>	---	---
Oil Age	hrs	Client Info	<b>1000</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>500	<b>296</b>	---	---
Chromium	ppm	ASTM D5185(m)	>8	<b>3</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>5	<b>5</b>	---	---
Lead	ppm	ASTM D5185(m)	>5	<b>12</b>	---	---
Copper	ppm	ASTM D5185(m)	>50	<b>487</b>	---	---
Tin	ppm	ASTM D5185(m)		<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	150	<b>90</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>3</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m)	70	<b>55</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	2000	<b>1137</b>	---	---
Zinc	ppm	ASTM D5185(m)	50	<b>276</b>	---	---
Sulfur	ppm	ASTM D5185(m)	20000	<b>26976</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

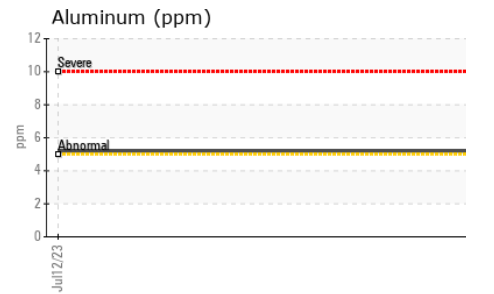
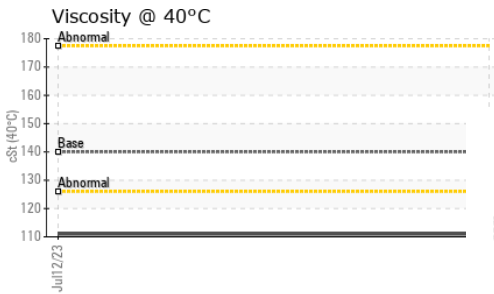
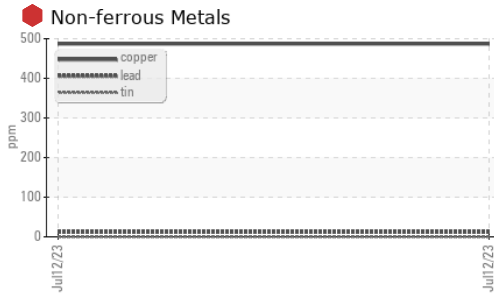
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>26</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---

## VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</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>VLITE</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*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---



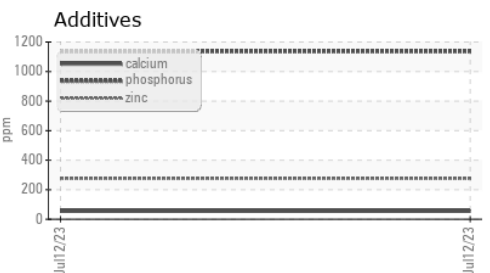
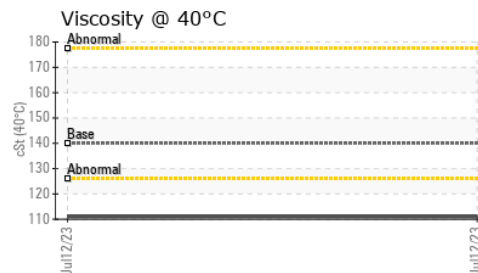
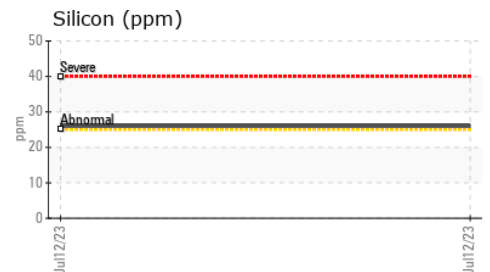
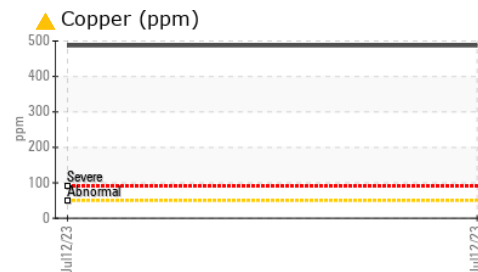
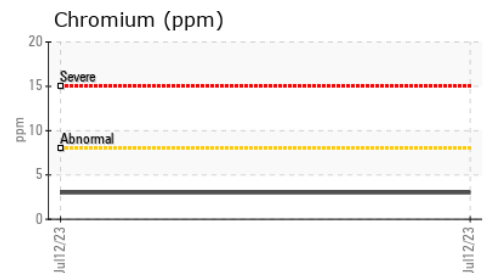
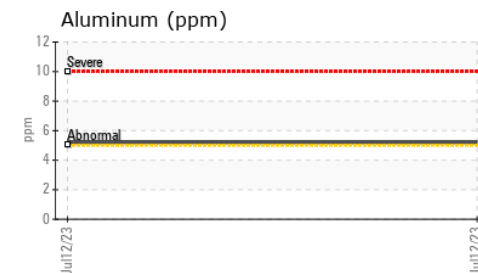
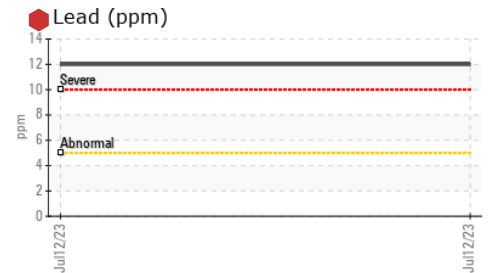
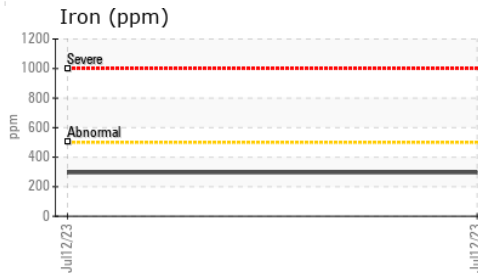
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	140	111	---	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088317  
**Lab Number** : 02575769  
**Unique Number** : 5620820  
**Test Package** : MOB 1

**GFL Environmental - Boylston**  
 151 Waste Management Road Hiwy 16  
 Boylston, NS  
 CA B0H 1G0  
 Contact: Bruce Avery  
 bruce.avery@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

T:  
F: