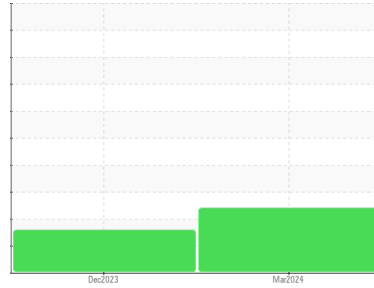




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**GMI Services**

Machine Id

**TB 4 SW4054CC09058**

Component

**Front Axle**

Fluid

**CITGO PREMIUM GEAR 80W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

Bearing and/or bushing wear is indicated. 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>PCA0115483</b>	LW0008253	---
Sample Date	Client Info	<b>27 Mar 2024</b>	19 Dec 2023	---
Machine Age	hrs	<b>1040</b>	455	---
Oil Age	hrs	<b>1040</b>	455	---
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >500	<b>▲ 530</b>	406	---
Chromium ppm	ASTM D5185m >10	<b>4</b>	3	---
Nickel ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Titanium ppm	ASTM D5185m	<b>2</b>	1	---
Silver ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum ppm	ASTM D5185m >25	<b>3</b>	2	---
Lead ppm	ASTM D5185m >25	<b>0</b>	0	---
Copper ppm	ASTM D5185m >50	<b>▲ 322</b>	<b>▲ 185</b>	---
Tin ppm	ASTM D5185m >10	<b>▲ 22</b>	<b>▲ 15</b>	---
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	<b>0</b>	<1	---
Barium ppm	ASTM D5185m	<b>5</b>	7	---
Molybdenum ppm	ASTM D5185m	<b>0</b>	0	---
Manganese ppm	ASTM D5185m	<b>16</b>	15	---
Magnesium ppm	ASTM D5185m	<b>&lt;1</b>	3	---
Calcium ppm	ASTM D5185m	<b>23</b>	12	---
Phosphorus ppm	ASTM D5185m	<b>1694</b>	1590	---
Zinc ppm	ASTM D5185m	<b>36</b>	35	---
Sulfur ppm	ASTM D5185m	<b>60293</b>	53402	---

## CONTAMINANTS

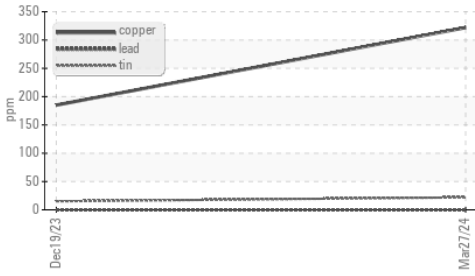
method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >75	<b>7</b>	6	---
Sodium ppm	ASTM D5185m	<b>4</b>	2	---
Potassium ppm	ASTM D5185m >20	<b>0</b>	0	---
Water %	ASTM D6304 >0.2	<b>0.157</b>	0.147	---
ppm Water	ASTM D6304 >2000	<b>1570</b>	1470	---

## VISUAL

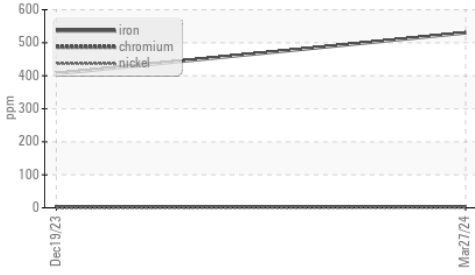
method	limit/base	current	history1	history2
White Metal scalar	*Visual NONE	<b>NONE</b>	NONE	---
Yellow Metal scalar	*Visual NONE	<b>NONE</b>	NONE	---
Precipitate scalar	*Visual NONE	<b>NONE</b>	NONE	---
Silt scalar	*Visual NONE	<b>NONE</b>	NONE	---
Debris scalar	*Visual NONE	<b>NONE</b>	NONE	---
Sand/Dirt 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 >0.2	<b>0.2%</b>	0.2%	---
Free Water scalar	*Visual	<b>NEG</b>	NEG	---

# OIL ANALYSIS REPORT

▲ **Non-ferrous Metals**



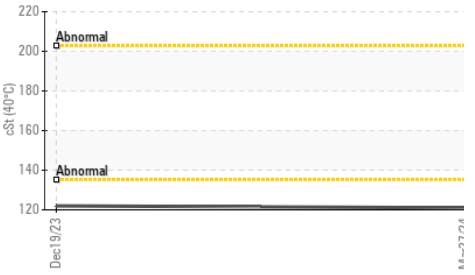
▲ **Ferrous Alloys**



**Water (KF)**



**Viscosity @ 40°C**



**FLUID PROPERTIES**

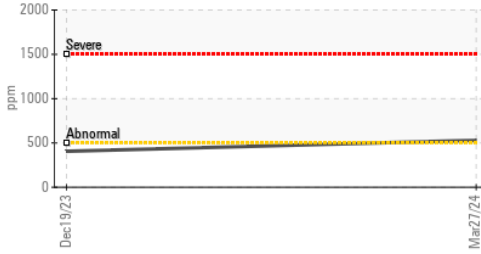
method	limit/base	current	history1	history2
Visc @ 40°C	cSt	121	122	---

**SAMPLE IMAGES**

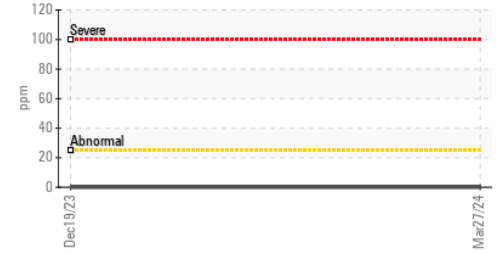
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

**GRAPHS**

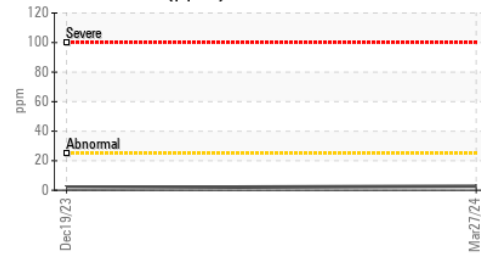
▲ **Iron (ppm)**



**Lead (ppm)**



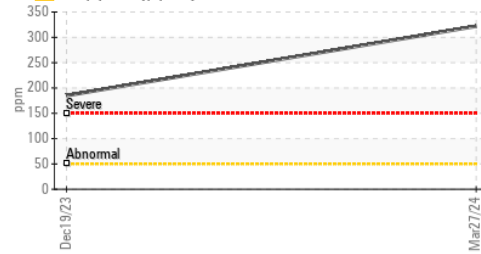
**Aluminum (ppm)**



**Chromium (ppm)**



▲ **Copper (ppm)**



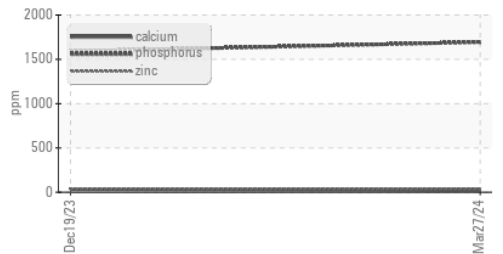
**Silicon (ppm)**



**Viscosity @ 40°C**



**Additives**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115483      **Received** : 02 Apr 2024  
**Lab Number** : 06136683      **Tested** : 03 Apr 2024  
**Unique Number** : 10956148      **Diagnosed** : 04 Apr 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: KF )

**CHICAGO MACHINERY INC**  
 3142 EAST LINCOLN  
 LYNWOOD, IL  
 US 60411-7728  
 Contact: Mike Korblik  
 mike@chicagomachineryinc.com  
 T: (708)758-2060  
 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)