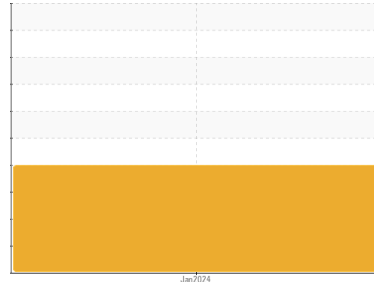




# PROBLEM SUMMARY

Sample Rating Trend

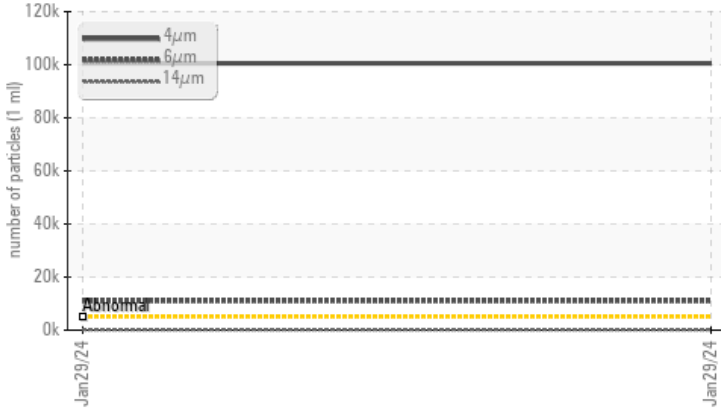
ISO



Machine Id  
**727075-361313**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### Particle Trend



## RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	---	---
Particles >4µm	ASTM D7647	>5000	100493	---	---
Particles >6µm	ASTM D7647	>1300	11055	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/21/15	---	---

Customer Id: GFL823  
 Sample No.: GFL0065748  
 Lab Number: 06080634  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

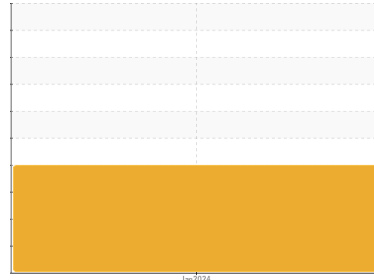
## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id  
**727075-361313**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0065748</b>	---	---
Sample Date	Client Info	<b>29 Jan 2024</b>	---	---
Machine Age	mls	Client Info	<b>0</b>	---
Oil Age	mls	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	---

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	<b>10</b>	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Silver	ppm	ASTM D5185m		<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	---
Lead	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m	>15	<b>2</b>	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	<b>1</b>	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	5	<b>2</b>	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m	25	<b>21</b>	---
Calcium	ppm	ASTM D5185m	200	<b>147</b>	---
Phosphorus	ppm	ASTM D5185m	300	<b>366</b>	---
Zinc	ppm	ASTM D5185m	370	<b>456</b>	---
Sulfur	ppm	ASTM D5185m	2500	<b>975</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>7</b>	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---

## FLUID CLEANLINESS

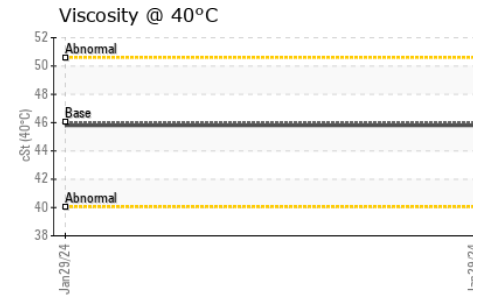
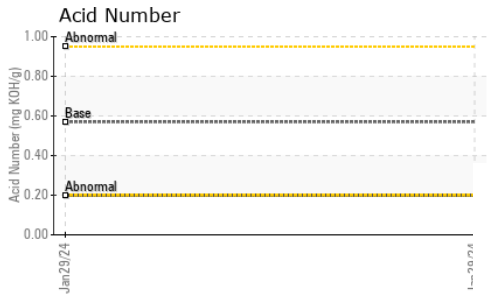
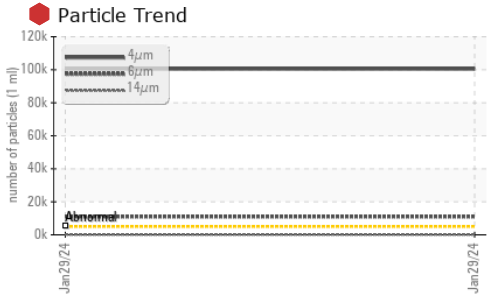
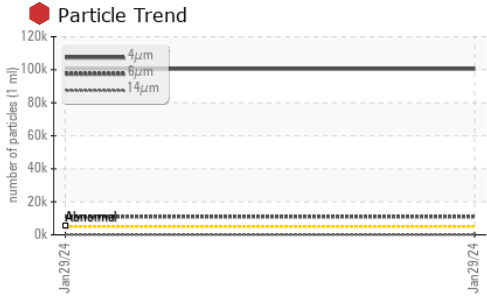
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>100493</b>	---
Particles >6µm	ASTM D7647	>1300	<b>11055</b>	---
Particles >14µm	ASTM D7647	>160	<b>167</b>	---
Particles >21µm	ASTM D7647	>40	<b>26</b>	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>24/21/15</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.20</b>	---



# OIL ANALYSIS REPORT



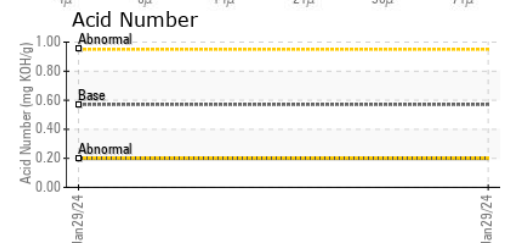
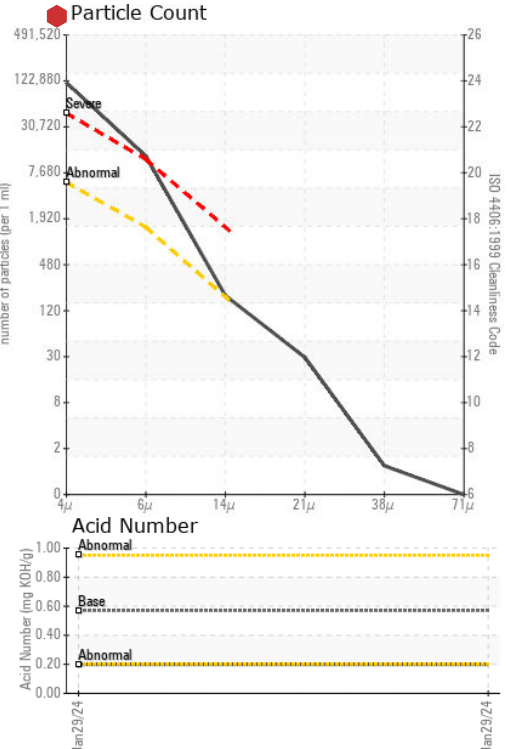
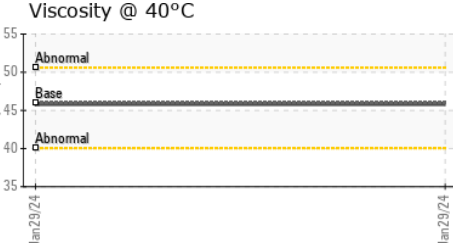
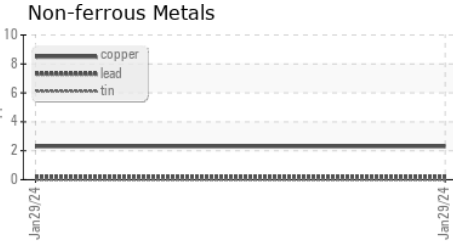
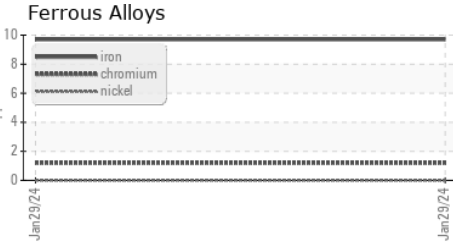
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46	45.8	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0065748 **Received** : 05 Feb 2024  
**Lab Number** : 06080634 **Diagnosed** : 06 Feb 2024  
**Unique Number** : 10862725 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: PrtCount )

**GFL Environmental - 823 - Central Missouri Hauling**  
 24461 Oak Grove Lane  
 Sedalia, MO  
 US 65301  
 Contact: Terry Randolph  
 trandolph@gflenv.com  
 T: (660)631-2116  
 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)