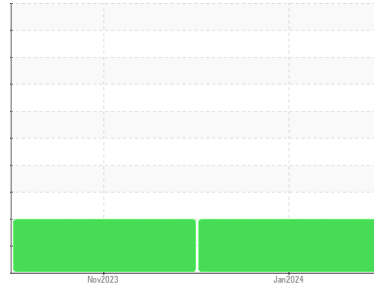




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**920096-260369**  
 Component  
**Hydraulic System**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. 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 moderate amount of particulates (2 to 100 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>GFL0102462</b>	GFL0102543	---
Sample Date	Client Info	<b>06 Jan 2024</b>	27 Nov 2023	---
Machine Age	hrs	<b>9080</b>	8807	---
Oil Age	hrs	<b>0</b>	0	---
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>4</b>	5	---
Chromium	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	---
Nickel	ppm ASTM D5185m >10	<b>0</b>	0	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >10	<b>2</b>	<1	---
Lead	ppm ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm ASTM D5185m >75	<b>2</b>	2	---
Tin	ppm ASTM D5185m >10	<b>&lt;1</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	<b>&lt;1</b>	0	---
Barium	ppm ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm ASTM D5185m	<b>2</b>	0	---
Manganese	ppm ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm ASTM D5185m	<b>11</b>	14	---
Calcium	ppm ASTM D5185m	<b>89</b>	94	---
Phosphorus	ppm ASTM D5185m	<b>350</b>	354	---
Zinc	ppm ASTM D5185m	<b>436</b>	454	---
Sulfur	ppm ASTM D5185m	<b>927</b>	934	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>&lt;1</b>	2	---
Sodium	ppm ASTM D5185m	<b>0</b>	2	---
Potassium	ppm ASTM D5185m >20	<b>1</b>	<1	---

## FLUID CLEANLINESS

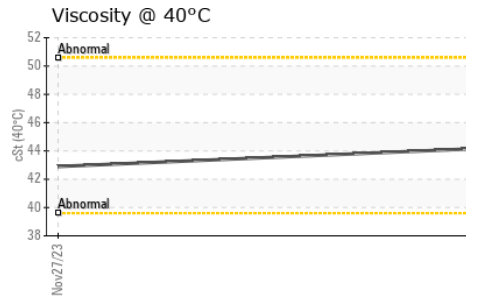
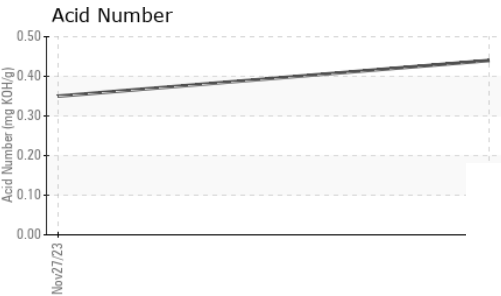
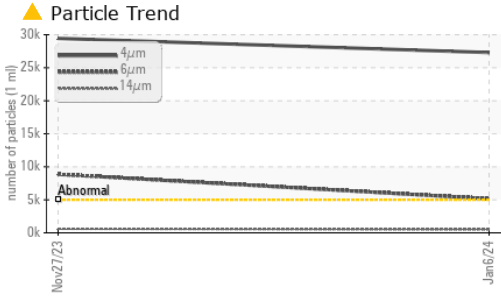
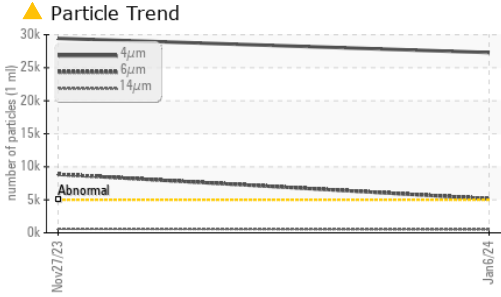
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 27296</b>	▲ 29444	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 5155</b>	▲ 8860	---
Particles >14µm	ASTM D7647 >160	<b>▲ 533</b>	▲ 614	---
Particles >21µm	ASTM D7647 >40	<b>▲ 211</b>	▲ 169	---
Particles >38µm	ASTM D7647 >10	<b>12</b>	9	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/20/16</b>	▲ 22/20/16	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.44</b>	0.35	---



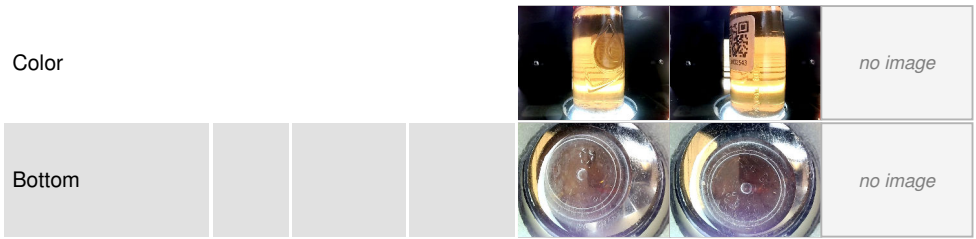
# OIL ANALYSIS REPORT



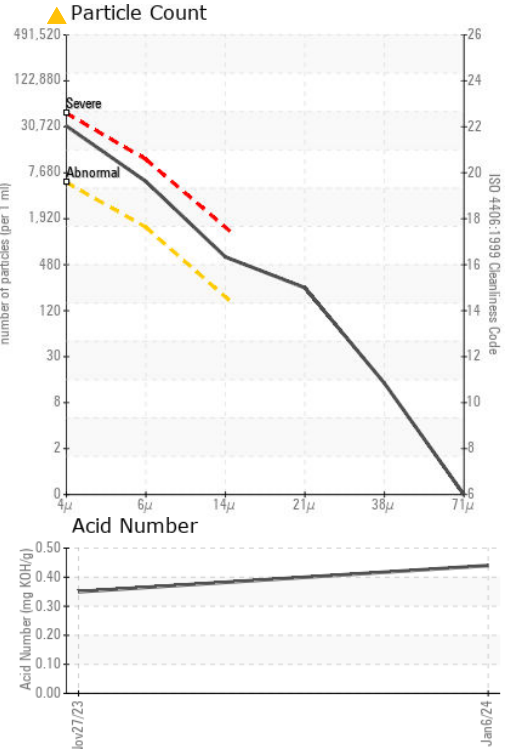
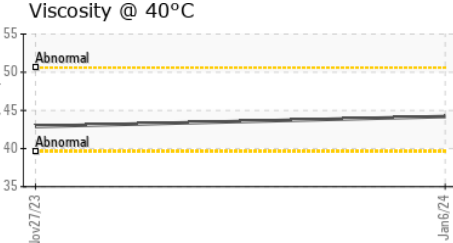
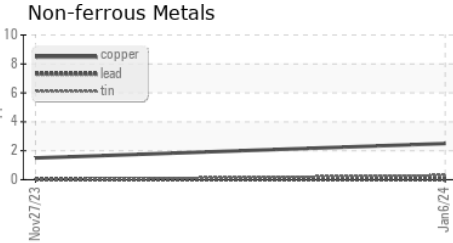
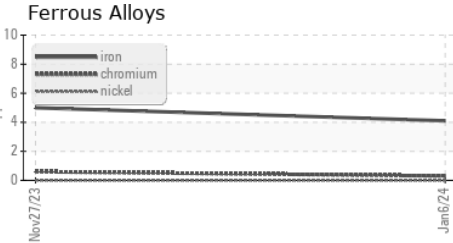
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.2	42.9	---

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102462 **Received** : 16 Jan 2024  
**Lab Number** : 06061906 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10833288 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: PrtCount )

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
**Contact: BRYAN SWANSON**  
 bryanswanson@gflenv.com

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)

T:  
F: