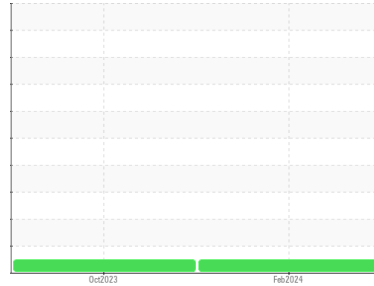




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**511026**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0096089</b>	GFL0084494	---
Sample Date	Client Info			<b>02 Feb 2024</b>	04 Oct 2023	---
Machine Age	hrs	Client Info		<b>7625</b>	7049	---
Oil Age	hrs	Client Info		<b>576</b>	600	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>17</b>	22	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>12</b>	14	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	5	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>91</b>	57	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>50</b>	52	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>703</b>	784	---
Calcium	ppm	ASTM D5185m		<b>1373</b>	1604	---
Phosphorus	ppm	ASTM D5185m		<b>761</b>	771	---
Zinc	ppm	ASTM D5185m		<b>868</b>	910	---
Sulfur	ppm	ASTM D5185m		<b>2921</b>	3169	---

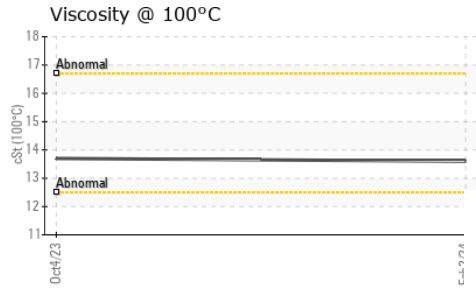
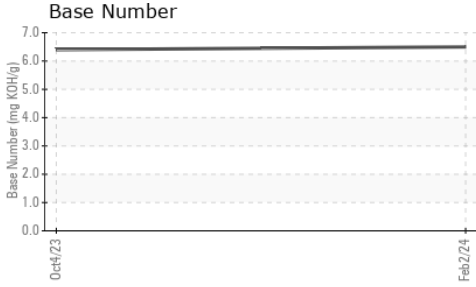
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	---
Sodium	ppm	ASTM D5185m		<b>4</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	13	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	16.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.5</b>	6.4	---



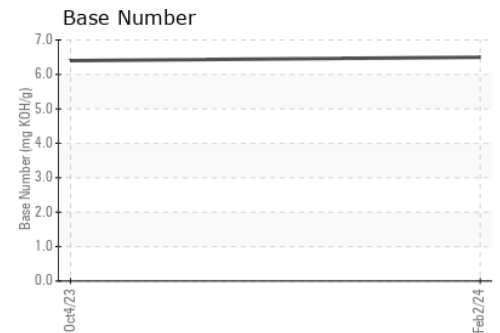
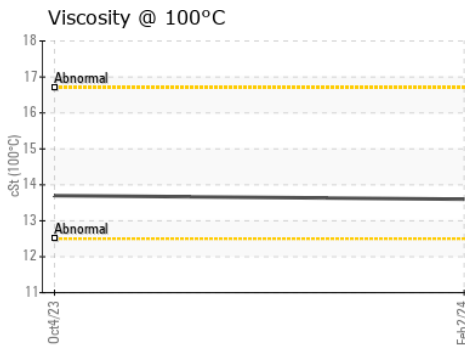
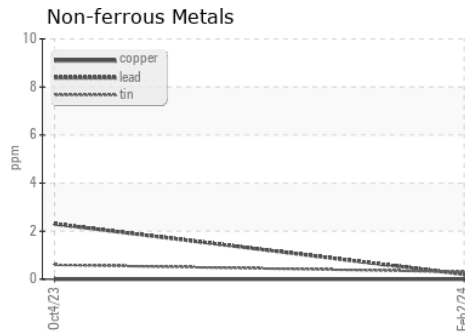
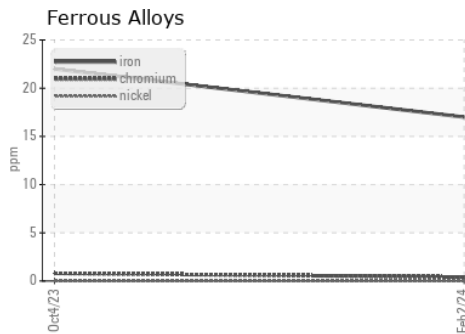
# OIL ANALYSIS REPORT



PARAMETER	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	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>13.6</b>	13.7	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096089  
**Lab Number** : **06082311**  
**Unique Number** : 10869756  
**Test Package** : FLEET

**Received** : 07 Feb 2024  
**Tested** : 08 Feb 2024  
**Diagnosed** : 08 Feb 2024 - Wes Davis

**GFL Environmental - 629 - Northern A1**  
 3947 US 131 N  
 Kalkaska, MI  
 US 49646-8428  
**Contact: MITCH HERSHBERGER**

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: (231)624-0848

F: