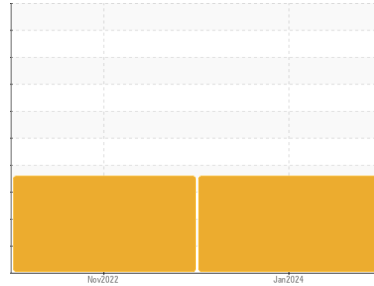




# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id  
**251016**  
 Component  
**Gasoline Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. 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

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### ▲ Fluid Condition

The BN level is low.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0098214</b>	GFL0047847	---
Sample Date	Client Info			<b>19 Jan 2024</b>	03 Nov 2022	---
Machine Age	mls	Client Info		<b>99793</b>	0	---
Oil Age	mls	Client Info		<b>99793</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
Fuel	WC Method	>4.0	<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	>150	<b>21</b>	35	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>40	<b>▲ 6</b>	▲ 8	---
Lead	ppm	ASTM D5185m	>50	<b>1</b>	<1	---
Copper	ppm	ASTM D5185m	>155	<b>24</b>	4	---
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>47</b>	27	---
Barium	ppm	ASTM D5185m		<b>2</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>176</b>	21	---
Manganese	ppm	ASTM D5185m		<b>5</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>422</b>	315	---
Calcium	ppm	ASTM D5185m		<b>1264</b>	1796	---
Phosphorus	ppm	ASTM D5185m		<b>655</b>	782	---
Zinc	ppm	ASTM D5185m		<b>823</b>	1112	---
Sulfur	ppm	ASTM D5185m		<b>2648</b>	3518	---

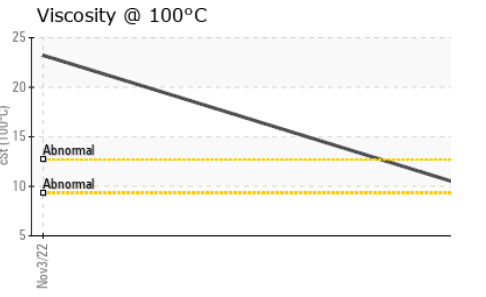
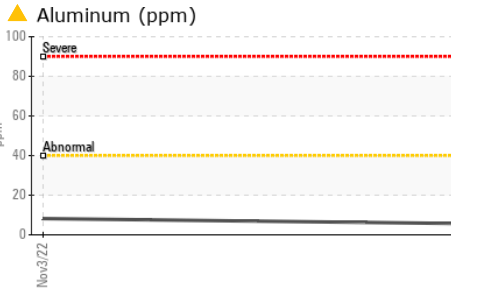
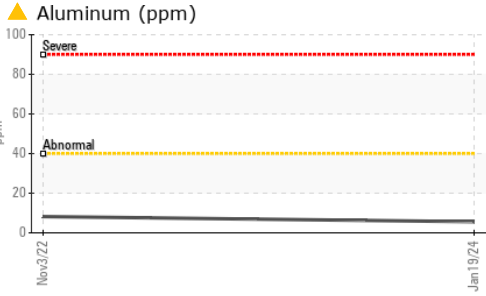
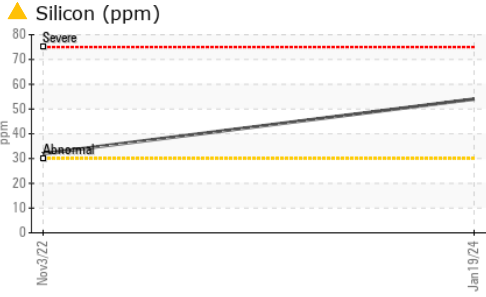
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>▲ 54</b>	▲ 32	---
Sodium	ppm	ASTM D5185m	>400	<b>&lt;1</b>	15	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	29.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	53.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	70.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 2.9</b>	▲ 1.3	---



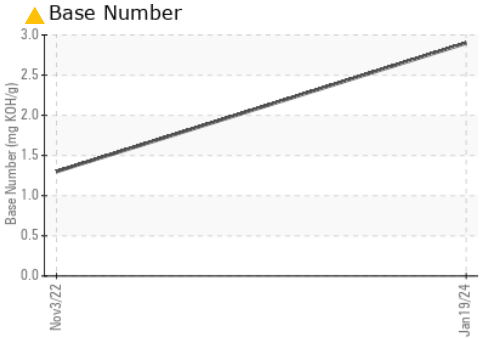
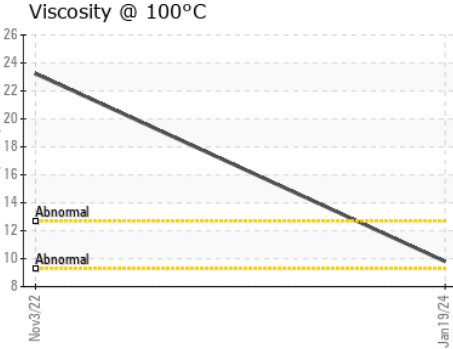
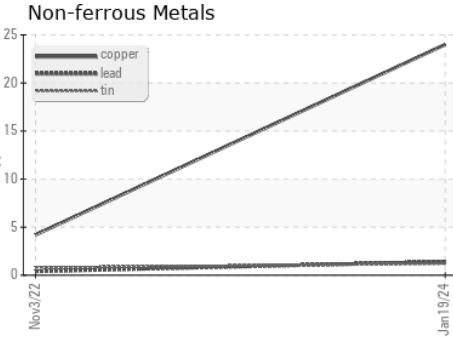
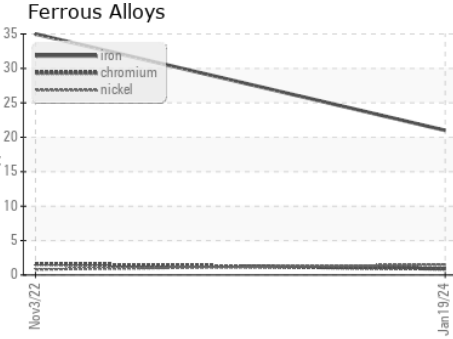
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>9.8</b>	23.23	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098214 **Recieved** : 23 Jan 2024  
**Lab Number** : **06068210** **Diagnosed** : 25 Jan 2024  
**Unique Number** : 10844887 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 652 - Fredericksburg Hauling**  
 10954 Houser Drive  
 Fredericksburg, VA  
 US 22408  
 Contact: WILLIAM MILO  
 wmilo@gflenv.com

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)