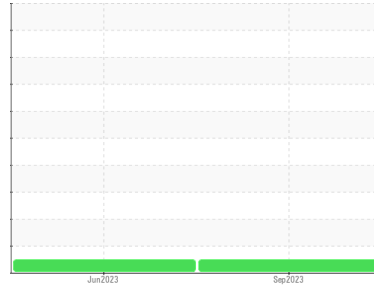




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**813012**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### 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>GFL0083868</b>	GFL0083850	---
Sample Date	Client Info			<b>27 Sep 2023</b>	16 Jun 2023	---
Machine Age	hrs	Client Info		<b>2432</b>	0	---
Oil Age	hrs	Client Info		<b>2432</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>19</b>	26	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	4	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>17</b>	37	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	3	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>2</b>	8	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	100	<b>60</b>	68	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m	450	<b>953</b>	1004	---
Calcium	ppm	ASTM D5185m	3000	<b>1051</b>	1228	---
Phosphorus	ppm	ASTM D5185m	1150	<b>989</b>	953	---
Zinc	ppm	ASTM D5185m	1350	<b>1271</b>	1257	---
Sulfur	ppm	ASTM D5185m	4250	<b>2681</b>	2760	---

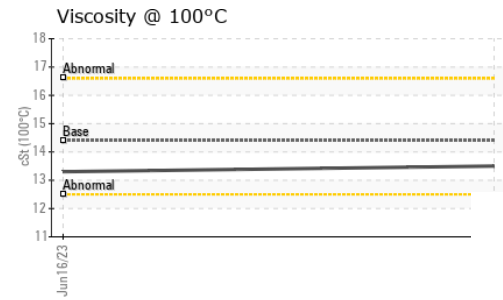
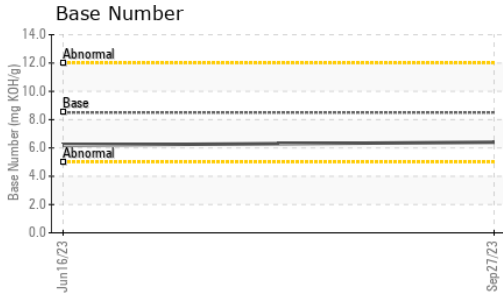
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	10	---
Sodium	ppm	ASTM D5185m	>216	<b>4</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	22.0	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.3</b>	19.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.4</b>	6.2	---



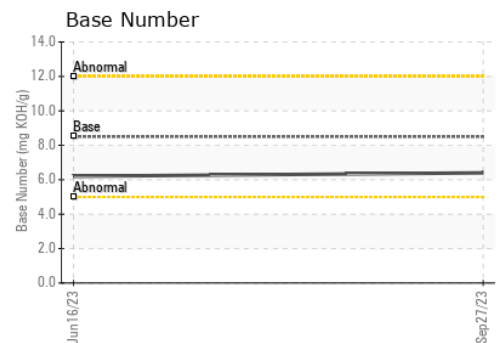
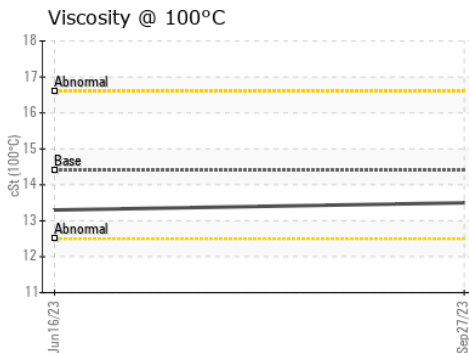
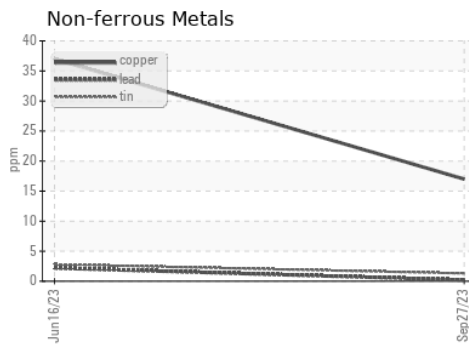
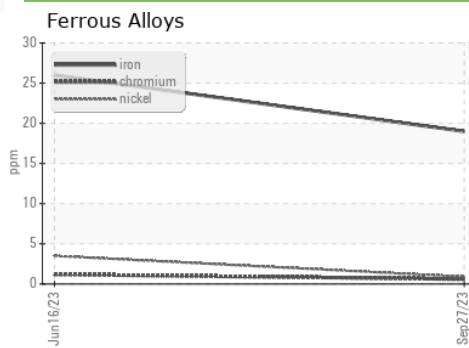
# OIL ANALYSIS REPORT



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	14.4	<b>13.5</b>	13.3	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0083868 **Received** : 02 Oct 2023  
**Lab Number** : **05966025** **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10672576 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 652 - Fredericksburg Hauling**  
 10954 Houser Drive  
 Fredericksburg, VA  
 US 22408  
 Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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)

T:  
F: