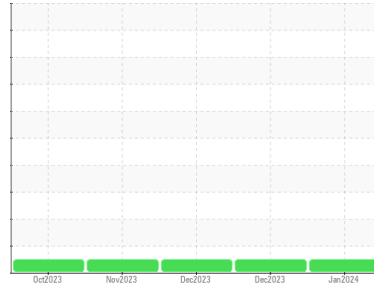




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**834050**  
 Component  
**Natural Gas Engine**  
 Fluid  
**RDL-3647 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>GFL0108155</b>	GFL0102486	GFL0102513
Sample Date	Client Info		<b>15 Jan 2024</b>	20 Dec 2023	12 Dec 2023
Machine Age	hrs	Client Info	<b>737</b>	589	525
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>56</b>	50	53
Chromium	ppm	ASTM D5185m >5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>2</b>	<1	2
Titanium	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	2	3
Lead	ppm	ASTM D5185m >40	<b>2</b>	1	<1
Copper	ppm	ASTM D5185m >150	<b>16</b>	15	17
Tin	ppm	ASTM D5185m >4	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>17</b>	15	23
Barium	ppm	ASTM D5185m 5	<b>0</b>	2	3
Molybdenum	ppm	ASTM D5185m 50	<b>62</b>	63	65
Manganese	ppm	ASTM D5185m 0	<b>9</b>	8	9
Magnesium	ppm	ASTM D5185m 560	<b>706</b>	765	753
Calcium	ppm	ASTM D5185m 1510	<b>1023</b>	1094	1053
Phosphorus	ppm	ASTM D5185m 780	<b>672</b>	697	745
Zinc	ppm	ASTM D5185m 870	<b>878</b>	949	948
Sulfur	ppm	ASTM D5185m 2040	<b>2387</b>	2476	2475

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>28</b>	27	29
Sodium	ppm	ASTM D5185m	<b>9</b>	3	5
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	3

## INFRA-RED

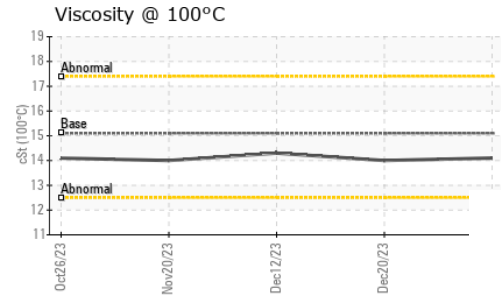
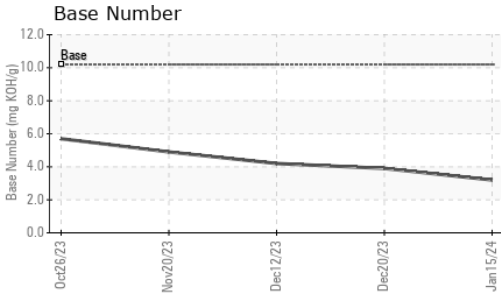
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.2</b>	11.0	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.3</b>	22.2	21.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.4</b>	20.1	19.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>3.2</b>	3.9	4.2



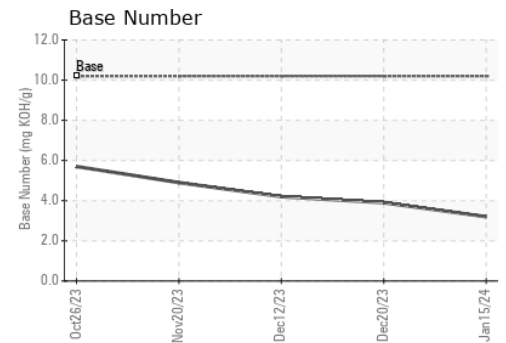
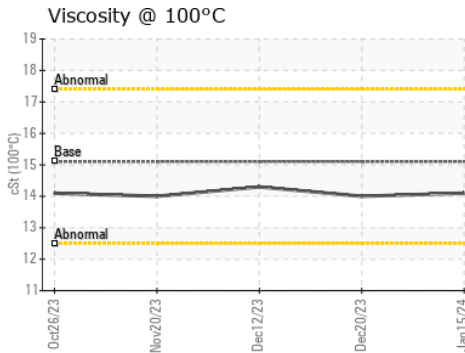
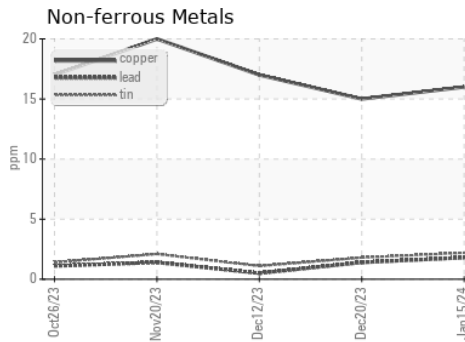
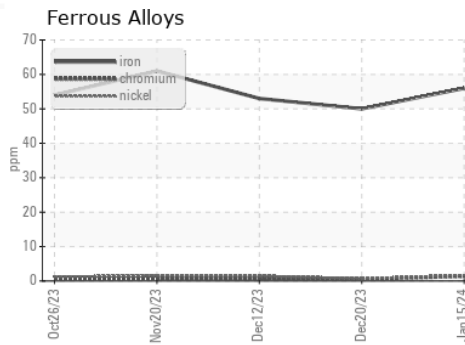
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.0	14.3

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0108155 Recieved : 25 Jan 2024  
 Lab Number : 06070960 Diagnosed : 26 Jan 2024  
 Unique Number : 10847637 Diagnostician : Wes Davis  
 Test Package : FLEET

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

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F: