



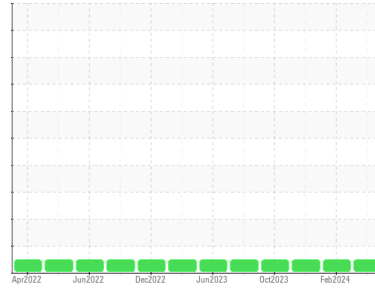
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(YA169099)**  
Machine Id  
**832003**  
Component  
**Natural Gas Engine**  
Fluid  
**RDL-3647 (5 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>GFL0112920</b>	GFL0079624	GFL0098114
Sample Date	Client Info		<b>26 Feb 2024</b>	22 Feb 2024	10 Nov 2023
Machine Age	hrs	Client Info	<b>645</b>	645	645
Oil Age	hrs	Client Info	<b>752</b>	752	436
Oil Changed	Client Info		<b>N/A</b>	N/A	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>13</b>	11	9
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >30	<b>0</b>	2	1
Copper	ppm	ASTM D5185m >35	<b>1</b>	1	1
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>8</b>	10	9
Barium	ppm	ASTM D5185m 5	<b>8</b>	8	0
Molybdenum	ppm	ASTM D5185m 50	<b>55</b>	55	56
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 560	<b>533</b>	547	577
Calcium	ppm	ASTM D5185m 1510	<b>1504</b>	1521	1633
Phosphorus	ppm	ASTM D5185m 780	<b>725</b>	745	724
Zinc	ppm	ASTM D5185m 870	<b>949</b>	953	988
Sulfur	ppm	ASTM D5185m 2040	<b>2433</b>	2435	2540

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	4	5
Sodium	ppm	ASTM D5185m	<b>7</b>	5	2
Potassium	ppm	ASTM D5185m >20	<b>16</b>	4	4

## INFRA-RED

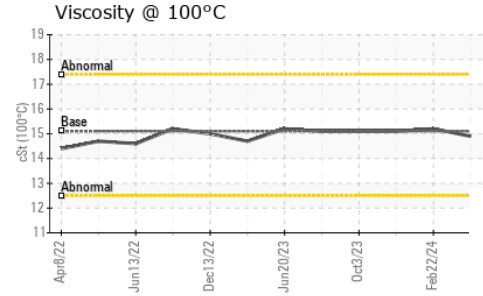
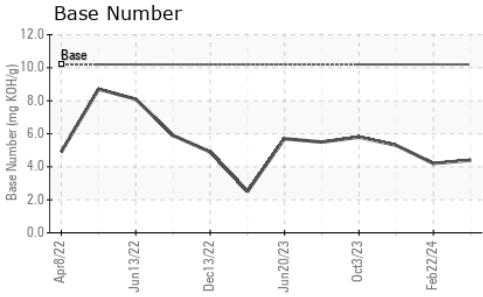
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.8</b>	11.5	10.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.3</b>	24.4	20.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.4</b>	20.4	18.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.4</b>	4.2	5.3



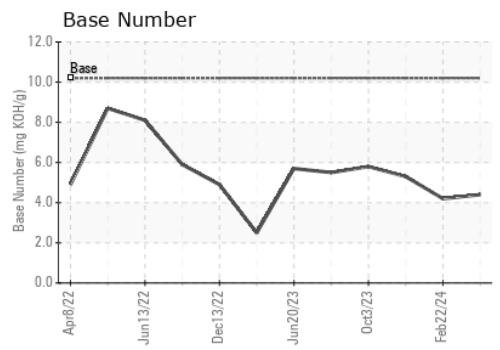
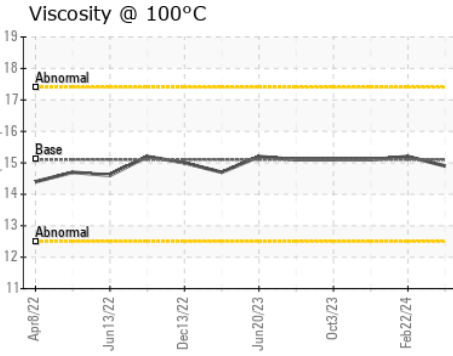
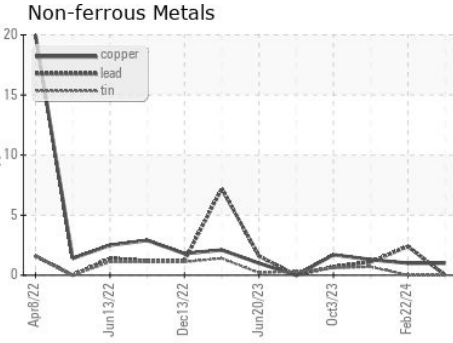
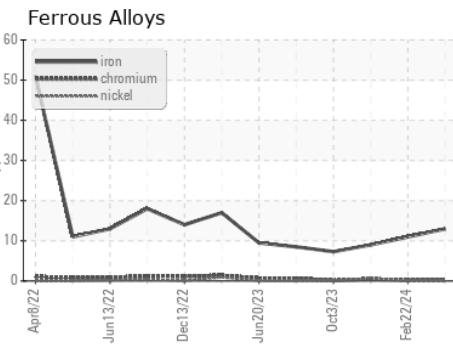
# OIL ANALYSIS REPORT



VISUAL	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	<b>14.9</b>	15.2	15.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112920      **Received** : 26 Feb 2024  
**Lab Number** : **06100019**      **Tested** : 27 Feb 2024  
**Unique Number** : 10898249      **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 017 - Durham**  
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 Durham, NC  
 US 27703  
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 bill.waring@wearcheck.com  
 T: (919)596-1363  
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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)