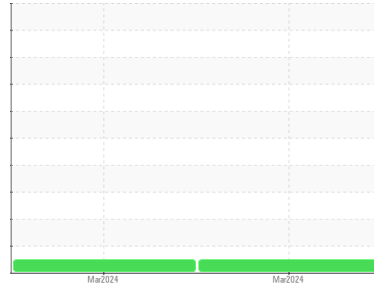




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**911056**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. 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>GFL0068814</b>	GFL0068848	---
Sample Date	Client Info	<b>19 Mar 2024</b>	01 Mar 2024	---
Machine Age	hrs Client Info	<b>1536</b>	1393	---
Oil Age	hrs Client Info	<b>143</b>	1393	---
Oil Changed	Client Info	<b>Not 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>16</b>	12	---
Chromium	ppm ASTM D5185m >20	<b>2</b>	<1	---
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >20	<b>8</b>	7	---
Lead	ppm ASTM D5185m >40	<b>&lt;1</b>	0	---
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	---
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	0	---
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	---
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>6</b>	7	---
Barium	ppm ASTM D5185m 0	<b>1</b>	0	---
Molybdenum	ppm ASTM D5185m 60	<b>61</b>	57	---
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	---
Magnesium	ppm ASTM D5185m 1010	<b>878</b>	903	---
Calcium	ppm ASTM D5185m 1070	<b>1102</b>	1019	---
Phosphorus	ppm ASTM D5185m 1150	<b>1030</b>	975	---
Zinc	ppm ASTM D5185m 1270	<b>1167</b>	1116	---
Sulfur	ppm ASTM D5185m 2060	<b>3232</b>	3020	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>10</b>	7	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	2	---
Potassium	ppm ASTM D5185m >20	<b>10</b>	5	---

## INFRA-RED

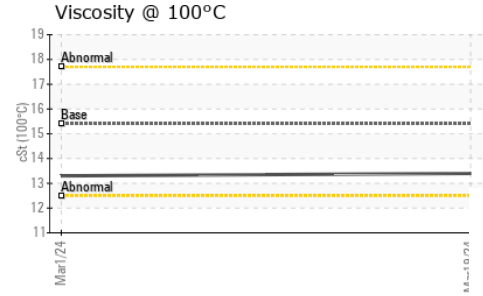
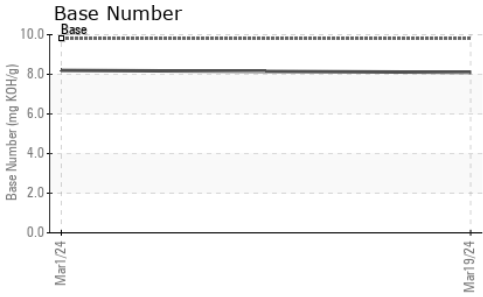
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	0.3	---
Nitration	Abs/cm *ASTM D7624 >20	<b>6.3</b>	5.6	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.5</b>	17.9	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.4</b>	13.0	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.1</b>	8.2	---



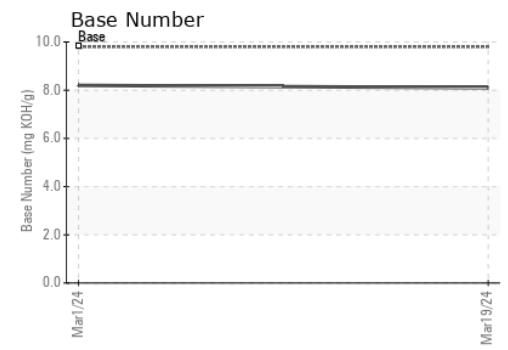
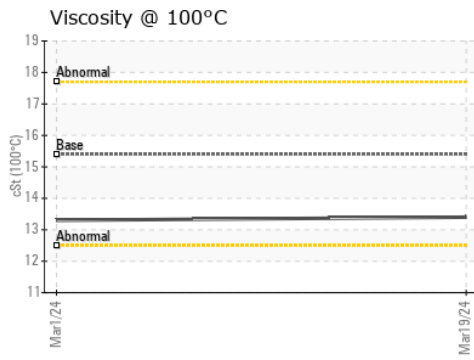
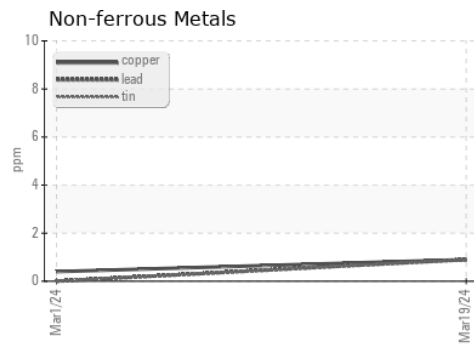
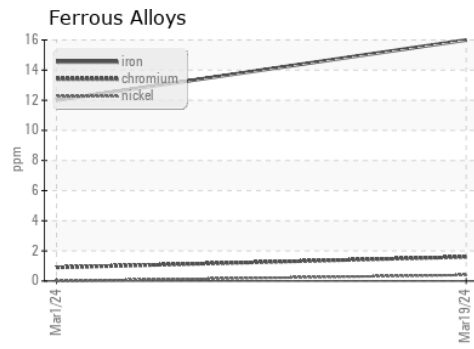
# OIL ANALYSIS REPORT



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	15.4	<b>13.4</b>	13.3	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0068814      **Received** : 25 Mar 2024  
**Lab Number** : **06128607**      **Tested** : 26 Mar 2024  
**Unique Number** : 10942758      **Diagnosed** : 26 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 073 - Warner Robins - Transwaste**  
 155 Story Road  
 Warner Robins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@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)