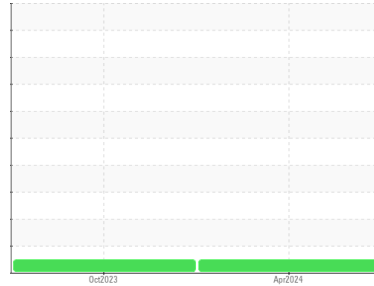




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**429107**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>GFL06136028</b>	GFL0066281	---
Sample Date	Client Info		<b>01 Apr 2024</b>	06 Oct 2023	---
Machine Age	hrs	Client Info	<b>0</b>	7239	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</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 >110	<b>20</b>	41	---
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>1</b>	3	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	5	---
Lead	ppm	ASTM D5185m >45	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >85	<b>&lt;1</b>	2	---
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>15</b>	8	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 60	<b>68</b>	71	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m 1010	<b>798</b>	319	---
Calcium	ppm	ASTM D5185m 1070	<b>1360</b>	1778	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1049</b>	945	---
Zinc	ppm	ASTM D5185m 1270	<b>1244</b>	1168	---
Sulfur	ppm	ASTM D5185m 2060	<b>3470</b>	3095	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m	<b>5</b>	11	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	12	---

## INFRA-RED

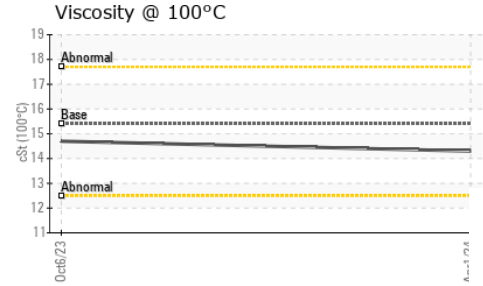
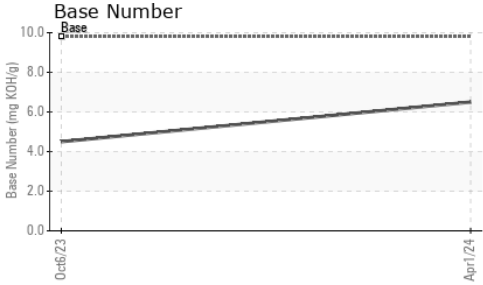
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.9	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.4</b>	13.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.2</b>	28.7	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.3</b>	25.5	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.5</b>	4.5	---



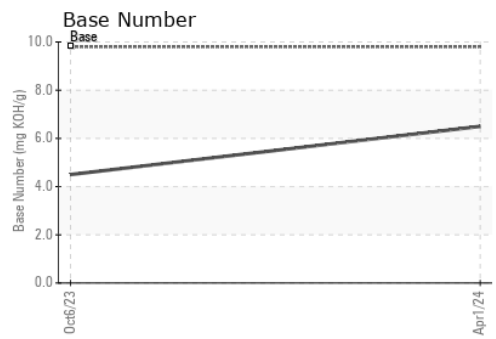
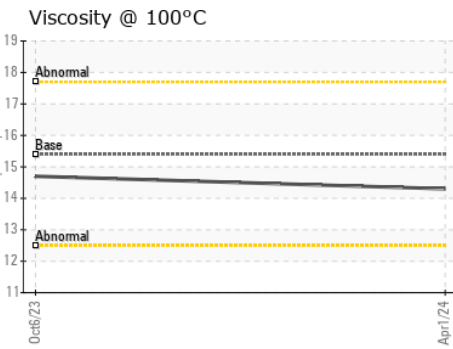
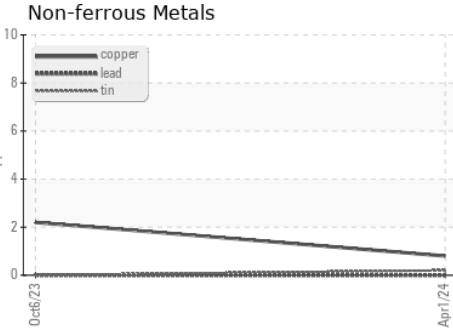
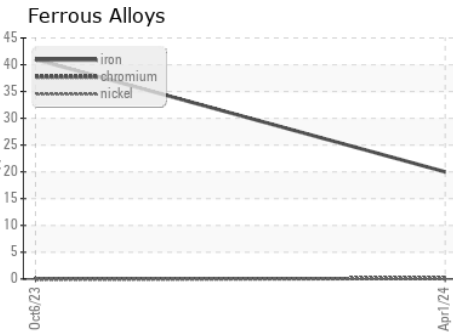
# OIL ANALYSIS REPORT



PARAMETER	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	14.3	14.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL06136028  
 Lab Number : 06136028  
 Unique Number : 10955493  
 Test Package : FLEET

Received : 02 Apr 2024  
 Tested : 03 Apr 2024  
 Diagnosed : 03 Apr 2024 - Wes Davis

GFL Environmental - 938 - Hager City  
 W9724 WIS-35  
 HAGER CITY, WI  
 US 54014  
 Contact: ANDY KANE

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: (715)202-3420

F: