



# PROBLEM SUMMARY

Sample Rating Trend



GLYCOL



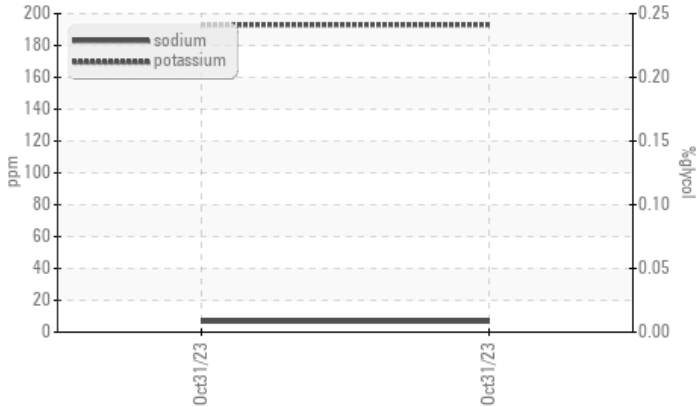
Machine Id  
**934056**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 193	---	---

Customer Id: GFL865  
 Sample No.: GFL0100511  
 Lab Number: 05998652  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**934056**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0100511</b>	---	---
Sample Date	Client Info	<b>31 Oct 2023</b>	---	---
Machine Age	hrs	Client Info	<b>594</b>	---
Oil Age	hrs	Client Info	<b>594</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>57</b>	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>20	<b>45</b>	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m	>330	<b>17</b>	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	<b>20</b>	---
Barium	ppm	ASTM D5185m	5	<b>3</b>	---
Molybdenum	ppm	ASTM D5185m	50	<b>64</b>	---
Manganese	ppm	ASTM D5185m	0	<b>14</b>	---
Magnesium	ppm	ASTM D5185m	560	<b>754</b>	---
Calcium	ppm	ASTM D5185m	1510	<b>1283</b>	---
Phosphorus	ppm	ASTM D5185m	780	<b>681</b>	---
Zinc	ppm	ASTM D5185m	870	<b>902</b>	---
Sulfur	ppm	ASTM D5185m	2040	<b>2302</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>33</b>	---
Sodium	ppm	ASTM D5185m		<b>7</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>▲ 193</b>	---
Glycol	%	*ASTM D2982		<b>NEG</b>	---

## INFRA-RED

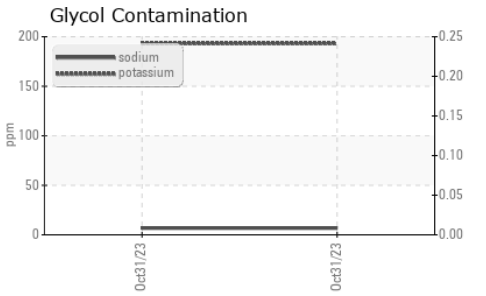
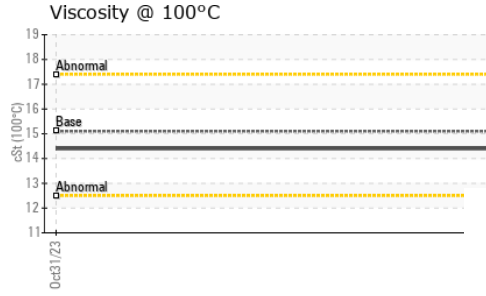
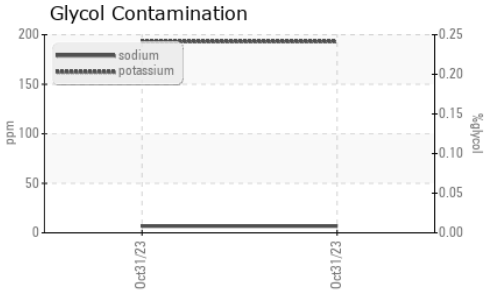
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.6</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.8</b>	---



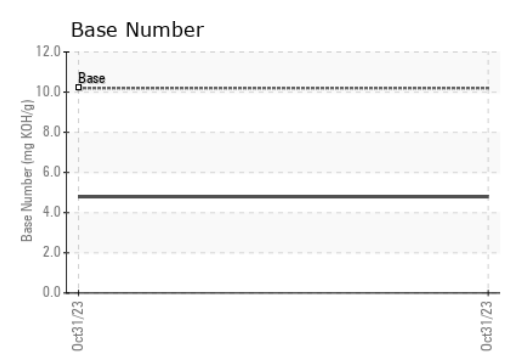
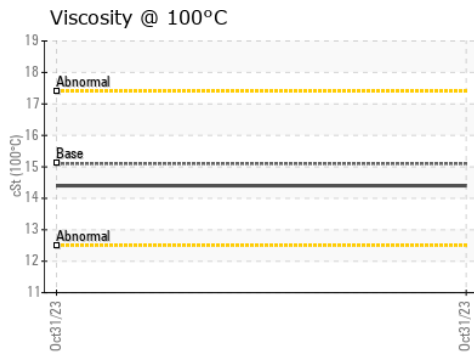
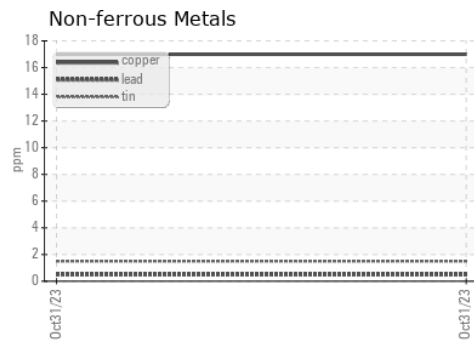
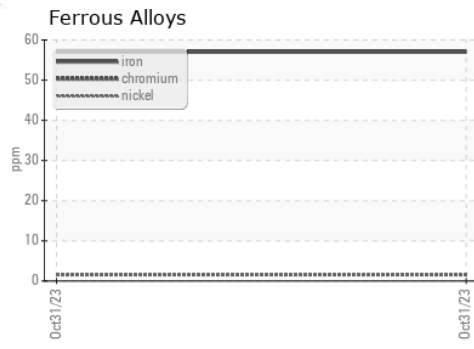
# OIL ANALYSIS REPORT



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	15.1	14.4	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0100511 **Received** : 06 Nov 2023  
**Lab Number** : 05998652 **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10727012 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: TECHNICIAN ACCOUNT  
 wcgfldemo@gmail.com

Certificate L2367  
 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)