



# PROBLEM SUMMARY

Sample Rating Trend

GLYCOL

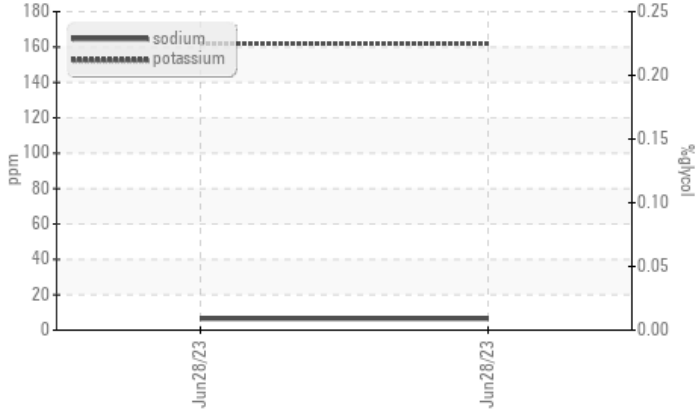


Machine Id  
**933033**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

No corrective action is recommended at this time.  
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 162	---	---

Customer Id: GFL856  
Sample No.: GFL0084704  
Lab Number: 05899271  
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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id  
**933033**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0084704</b>	---	---
Sample Date	Client Info	<b>28 Jun 2023</b>	---	---
Machine Age	hrs	<b>418</b>	---	---
Oil Age	hrs	<b>0</b>	---	---
Oil Changed	Client Info	<b>Not Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >120	<b>56</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>1</b>	---	---
Nickel	ppm ASTM D5185m >5	<b>1</b>	---	---
Titanium	ppm ASTM D5185m >2	<b>0</b>	---	---
Silver	ppm ASTM D5185m >2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>35</b>	---	---
Lead	ppm ASTM D5185m >40	<b>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 0	<b>33</b>	---	---
Barium	ppm ASTM D5185m 0	<b>3</b>	---	---
Molybdenum	ppm ASTM D5185m 60	<b>64</b>	---	---
Manganese	ppm ASTM D5185m 0	<b>16</b>	---	---
Magnesium	ppm ASTM D5185m 1010	<b>884</b>	---	---
Calcium	ppm ASTM D5185m 1070	<b>1349</b>	---	---
Phosphorus	ppm ASTM D5185m 1150	<b>795</b>	---	---
Zinc	ppm ASTM D5185m 1270	<b>999</b>	---	---
Sulfur	ppm ASTM D5185m 2060	<b>3136</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>38</b>	---	---
Sodium	ppm ASTM D5185m	<b>6</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>▲ 162</b>	---	---
Glycol	% *ASTM D2982	<b>NEG</b>	---	---

## INFRA-RED

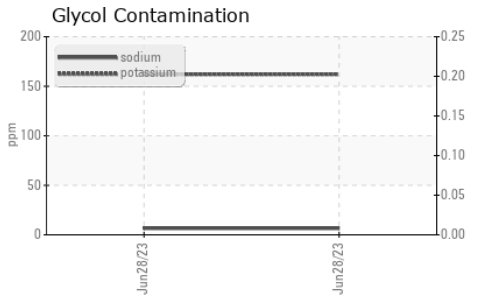
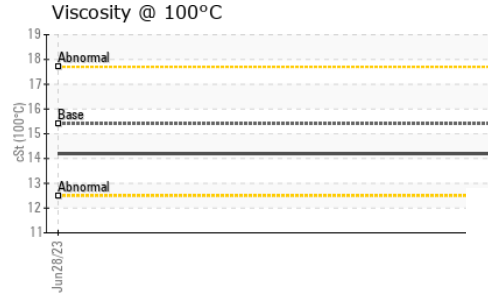
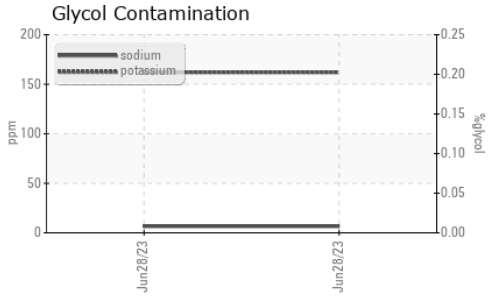
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	<b>0.1</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>11.5</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.3</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.2</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>5.8</b>	---	---



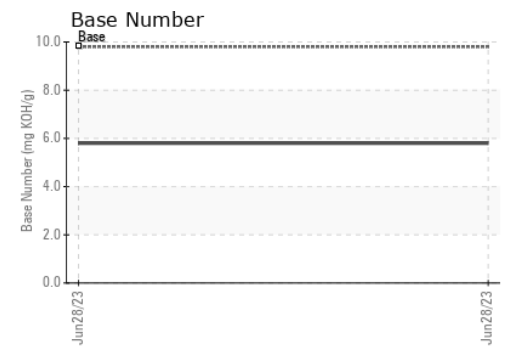
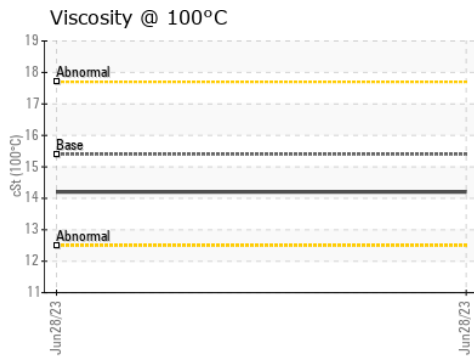
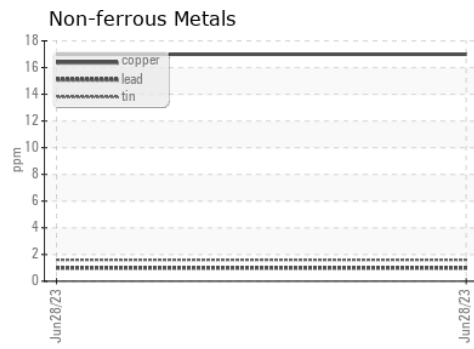
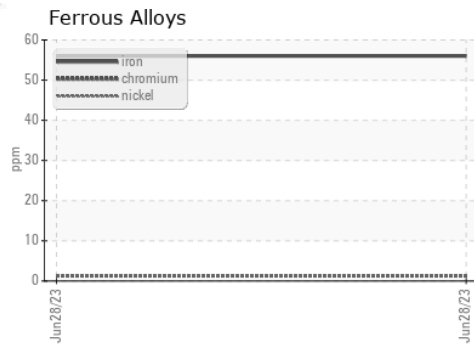
# OIL ANALYSIS REPORT



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	15.4	14.2	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0084704 **Received** : 14 Jul 2023  
**Lab Number** : 05899271 **Diagnosed** : 18 Jul 2023  
**Unique Number** : 10560627 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: KEITH ROWALD  
 krowald@gflenv.com  
 T: (303)641-3906  
 F:

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)