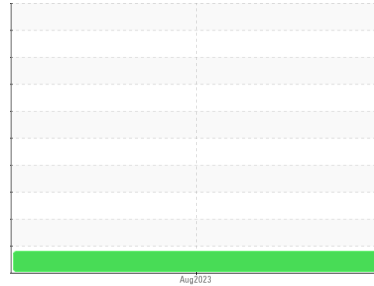




# PROBLEM SUMMARY

Sample Rating Trend



**SOOT**

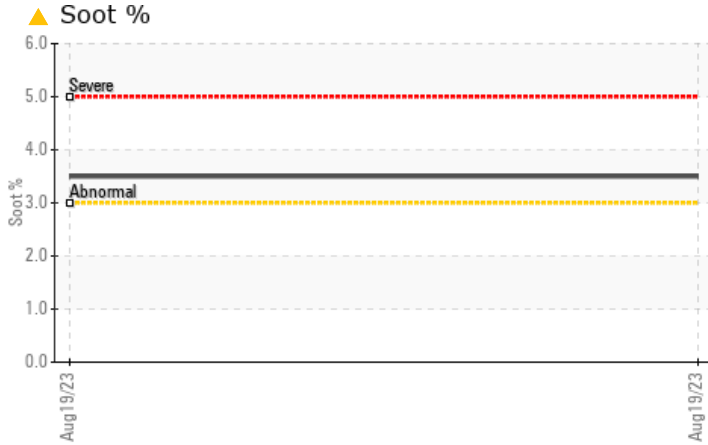


Machine Id  
**829078-259**

Component  
**Diesel Engine**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>▲ 3.5</b>	---	---

Customer Id: GFL904  
Sample No.: GFL0066043  
Lab Number: 05938083  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

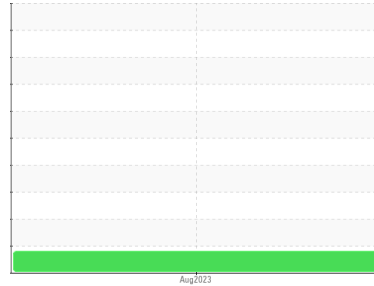
Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**SOOT**



Machine Id  
**829078-259**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done.

### Wear

All component wear rates are normal.

### ▲ Contamination

Light concentration of carbon/soot present in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0066043</b>	---	---
Sample Date	Client Info	<b>19 Aug 2023</b>	---	---
Machine Age	hrs	<b>0</b>	---	---
Oil Age	hrs	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	<b>64</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>4</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>1</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>1</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>23</b>	---	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 60	<b>53</b>	---	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m 1010	<b>820</b>	---	---
Calcium	ppm	ASTM D5185m 1070	<b>1468</b>	---	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1075</b>	---	---
Zinc	ppm	ASTM D5185m 1270	<b>1347</b>	---	---
Sulfur	ppm	ASTM D5185m 2060	<b>3989</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>9</b>	---	---
Sodium	ppm	ASTM D5185m	<b>6</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	---	---
Fuel	%	ASTM D3524 >2.0	<b>&lt;1.0</b>	---	---

## INFRA-RED

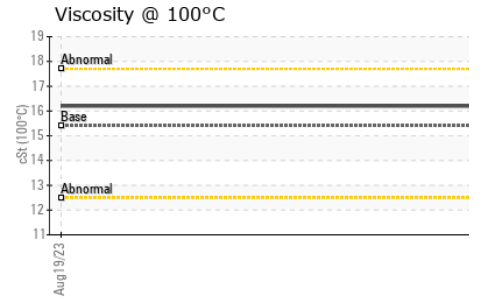
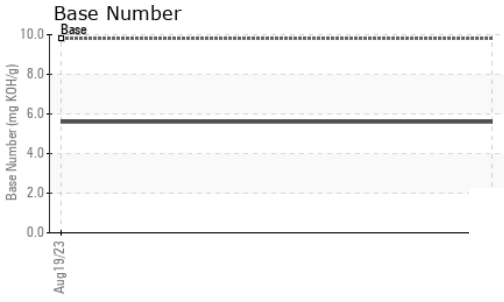
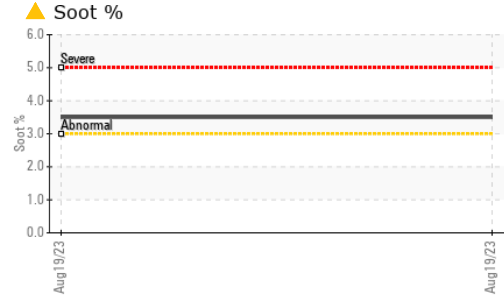
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	<b>▲ 3.5</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.3</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.0</b>	---	---

## 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 9.8	<b>5.6</b>	---	---



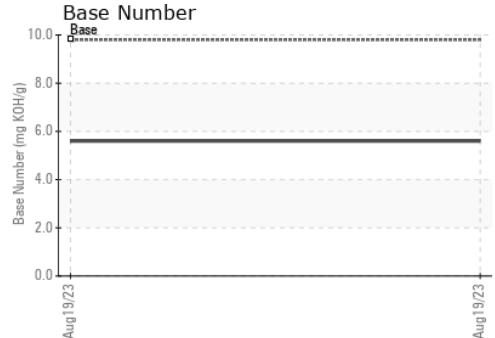
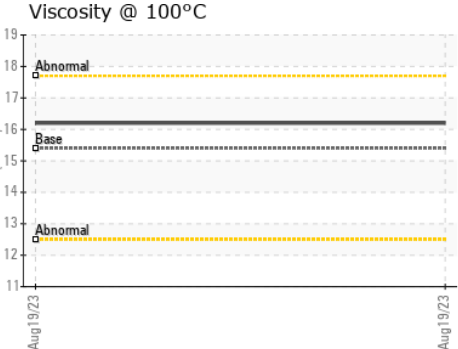
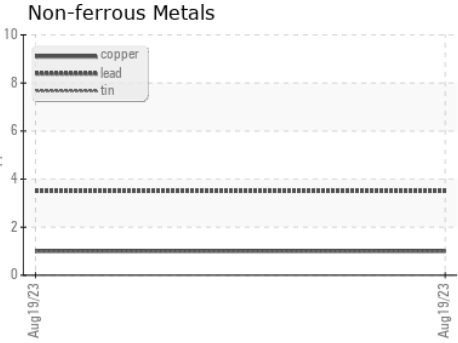
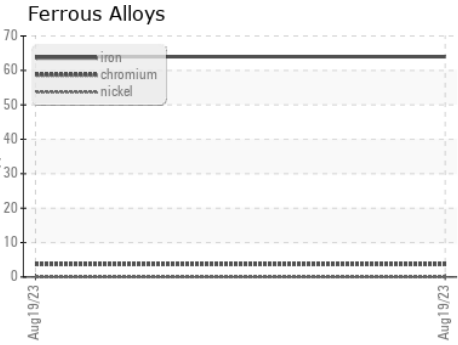
# OIL ANALYSIS REPORT



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	16.2	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0066043 **Received** : 30 Aug 2023  
**Lab Number** : 05938083 **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10628695 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution )

**GFL Environmental - 904 - Chippewa Falls HC**  
 11888 & 11863 30th Avenue  
 Chippewa Falls, WI  
 US 54729  
 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: