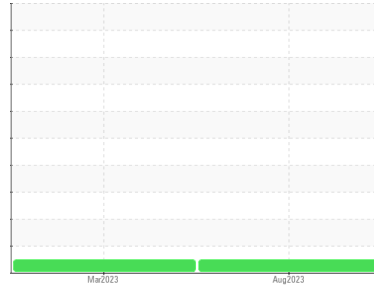




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**525065-130**

Component  
**Diesel Engine**

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

## 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>GFL0066045</b>	GFL0060330	---
Sample Date	Client Info	<b>23 Aug 2023</b>	01 Mar 2023	---
Machine Age	hrs	Client Info	<b>0</b>	12745
Oil Age	hrs	Client Info	<b>0</b>	500
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	---
Glycol	WC Method	<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	<b>44</b>	35	---
Chromium	ppm ASTM D5185m >5	<b>2</b>	2	---
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	---
Titanium	ppm ASTM D5185m	<b>0</b>	0	---
Silver	ppm ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >30	<b>6</b>	6	---
Lead	ppm ASTM D5185m >30	<b>5</b>	4	---
Copper	ppm ASTM D5185m >150	<b>1</b>	2	---
Tin	ppm ASTM D5185m >5	<b>3</b>	3	---
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>19</b>	19	---
Barium	ppm ASTM D5185m 0	<b>0</b>	2	---
Molybdenum	ppm ASTM D5185m 60	<b>65</b>	64	---
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	1	---
Magnesium	ppm ASTM D5185m 1010	<b>993</b>	869	---
Calcium	ppm ASTM D5185m 1070	<b>1175</b>	1157	---
Phosphorus	ppm ASTM D5185m 1150	<b>1044</b>	976	---
Zinc	ppm ASTM D5185m 1270	<b>1294</b>	1188	---
Sulfur	ppm ASTM D5185m 2060	<b>3704</b>	2903	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>5</b>	6	---
Sodium	ppm ASTM D5185m	<b>4</b>	2	---
Potassium	ppm ASTM D5185m >20	<b>1</b>	3	---

## INFRA-RED

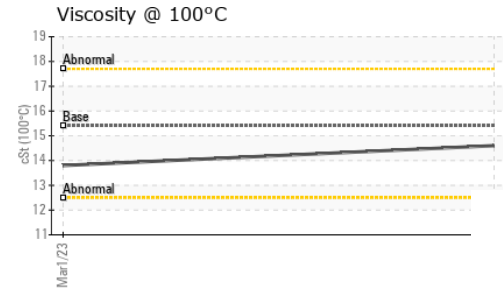
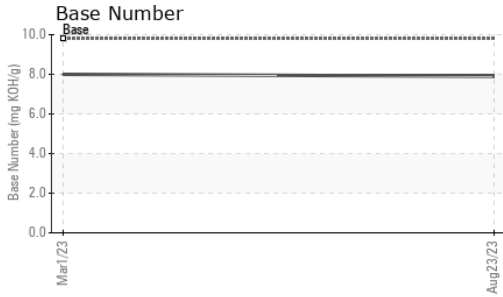
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>2.2</b>	1.4	---
Nitration	Abs/cm *ASTM D7624 >20	<b>8.4</b>	7.5	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.9</b>	20.6	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.0</b>	14.1	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.9</b>	8.0	---



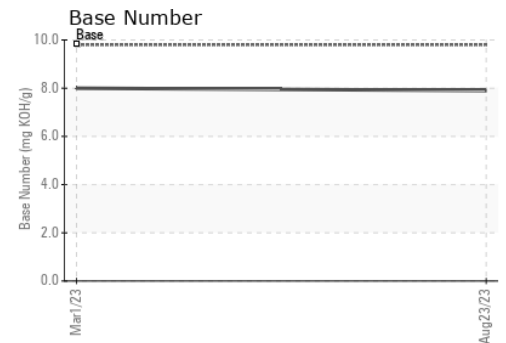
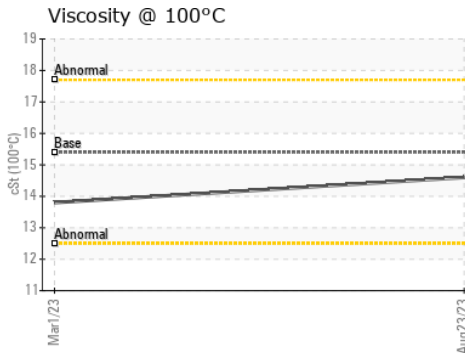
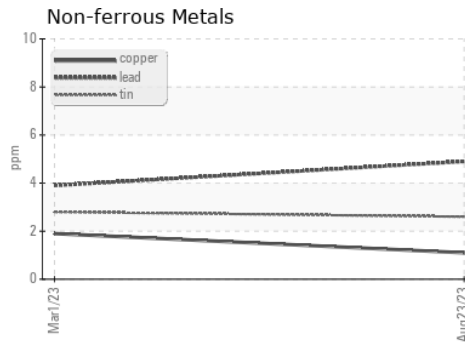
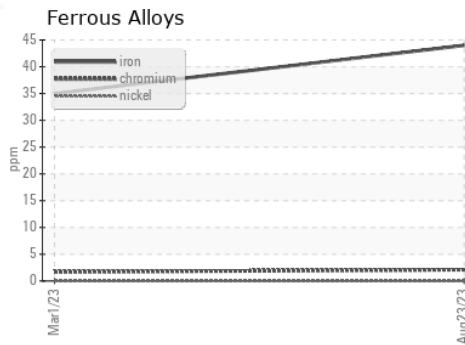
# OIL ANALYSIS REPORT



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>14.6</b>	13.8	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0066045 **Received** : 30 Aug 2023  
**Lab Number** : **05938062** **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10628674 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**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: