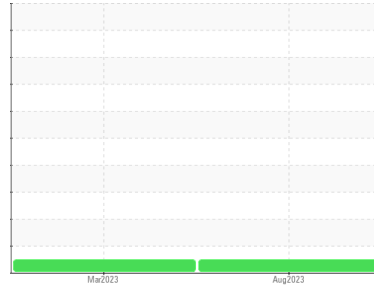




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**523067**

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>GFL0066044</b>	GFL0066116	---
Sample Date	Client Info	<b>22 Aug 2023</b>	06 Mar 2023	---
Machine Age	hrs	Client Info	<b>0</b>	22232
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	>6.0	<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	>100	<b>15</b>	27
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	3
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1
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>14</b>	33
Barium	ppm	ASTM D5185m	0	<b>0</b>	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1
Magnesium	ppm	ASTM D5185m	1010	<b>974</b>	901
Calcium	ppm	ASTM D5185m	1070	<b>1203</b>	1194
Phosphorus	ppm	ASTM D5185m	1150	<b>1076</b>	1045
Zinc	ppm	ASTM D5185m	1270	<b>1349</b>	1304
Sulfur	ppm	ASTM D5185m	2060	<b>3982</b>	3508

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	9
Sodium	ppm	ASTM D5185m		<b>3</b>	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1

## INFRA-RED

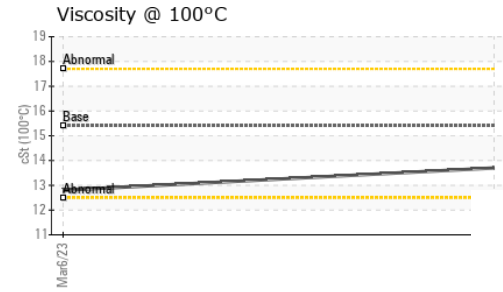
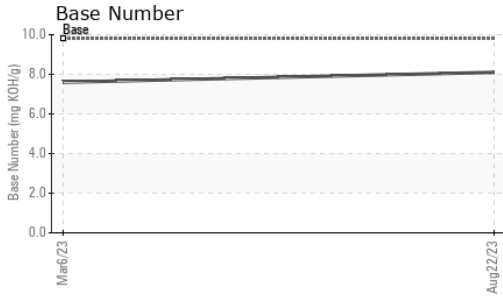
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	10.3
Sulfation	Abs.1mm	*ASTM D7415	>30	<b>18.7</b>	21.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs.1mm	*ASTM D7414	>25	<b>14.4</b>	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	7.6



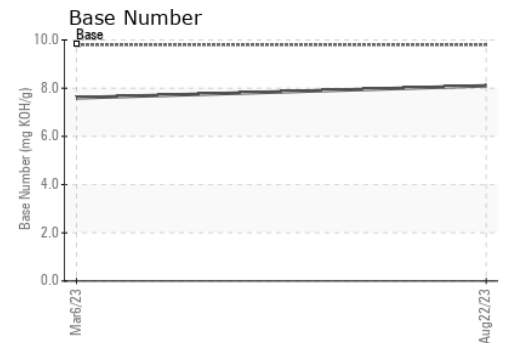
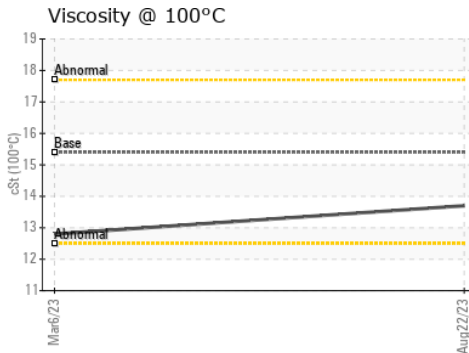
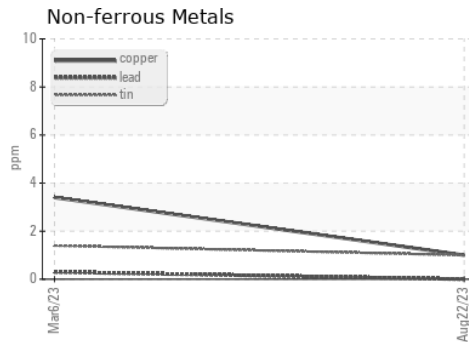
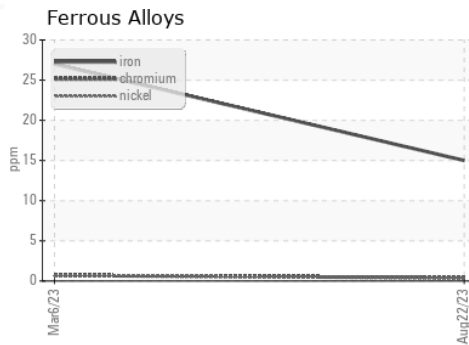
# OIL ANALYSIS REPORT



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	13.7	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0066044 **Received** : 30 Aug 2023  
**Lab Number** : 05938086 **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10628698 **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: