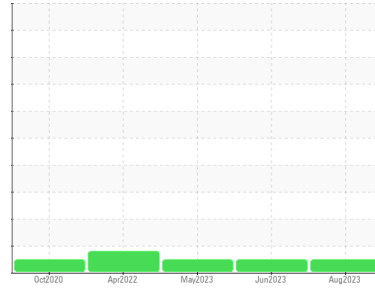




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**3807-609044**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>GFL0086561</b>	GFL0074339	GFL0074340
Sample Date	Client Info		<b>11 Aug 2023</b>	05 Jun 2023	11 May 2023
Machine Age	hrs	Client Info	<b>8466</b>	8081	7933
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>14</b>	3	9
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	<1	3
Lead	ppm	ASTM D5185m >40	<b>2</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>1</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	6
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>66</b>	60	66
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>973</b>	972	1036
Calcium	ppm	ASTM D5185m 1070	<b>1153</b>	1080	1148
Phosphorus	ppm	ASTM D5185m 1150	<b>1099</b>	1030	1127
Zinc	ppm	ASTM D5185m 1270	<b>1294</b>	1272	1461
Sulfur	ppm	ASTM D5185m 2060	<b>2873</b>	3712	4317

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	2	4
Sodium	ppm	ASTM D5185m	<b>0</b>	1	2
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	2

## INFRA-RED

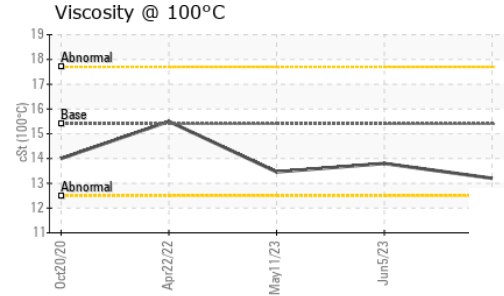
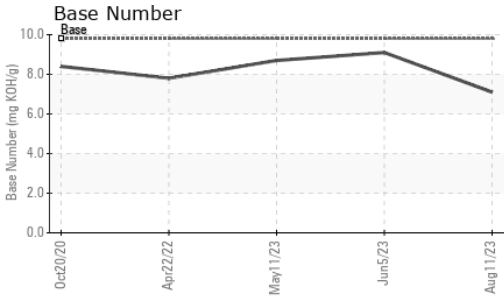
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.1</b>	0.4	0.8
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.4</b>	7.2	10.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.0</b>	19.2	20.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.9</b>	15.5	18.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.1</b>	9.1	8.7



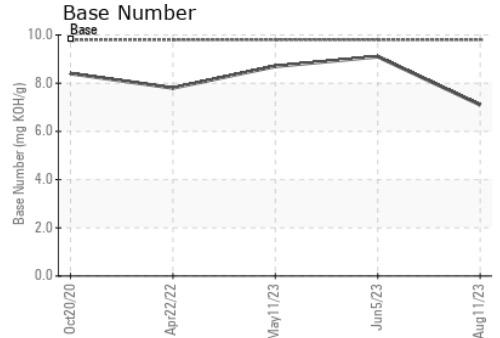
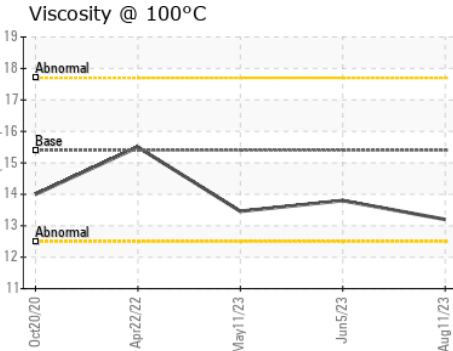
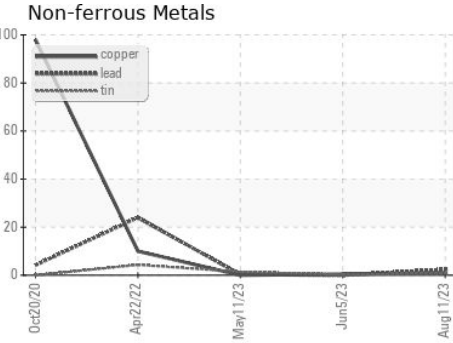
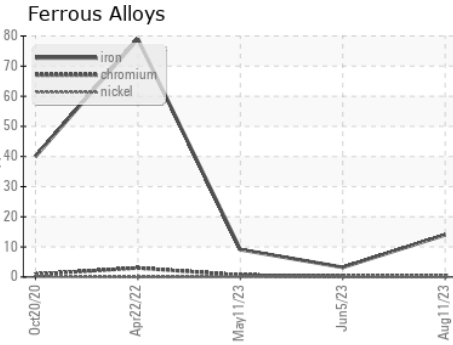
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.8	13.46

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0086561 **Received** : 15 Aug 2023  
**Lab Number** : **05924687** **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10604634 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 654 - Richmond Hauling**  
 11800 Lewis Road  
 Chester, VA  
 US 23831  
 Contact: Steven Palmore  
 spalmore@gflenv.com

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)