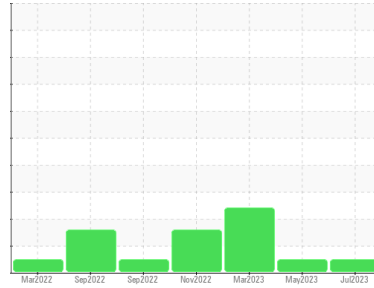




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**724027-367**

Component  
**Diesel Engine**

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

## 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>GFL0070604</b>	GFL0081185	GFL0074894	
Sample Date	Client Info	<b>11 Jul 2023</b>	30 May 2023	14 Mar 2023	
Machine Age	mls	Client Info	<b>124390</b>	9162	9023
Oil Age	mls	Client Info	<b>0</b>	150	600
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	ABNORMAL	

## 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>16</b>	11	29
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>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>6</b>	4	▲ 7
Lead	ppm ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	<1	1
Tin	ppm ASTM D5185m >15	<b>0</b>	0	<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>19</b>	27	219
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>68</b>	63	86
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm ASTM D5185m 1010	<b>960</b>	895	437
Calcium	ppm ASTM D5185m 1070	<b>1192</b>	1162	1397
Phosphorus	ppm ASTM D5185m 1150	<b>1100</b>	1032	1014
Zinc	ppm ASTM D5185m 1270	<b>1406</b>	1286	1247
Sulfur	ppm ASTM D5185m 2060	<b>3841</b>	3736	2899

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>18</b>	14	▲ 33
Sodium	ppm ASTM D5185m	<b>25</b>	16	13
Potassium	ppm ASTM D5185m >20	<b>0</b>	2	3

## INFRA-RED

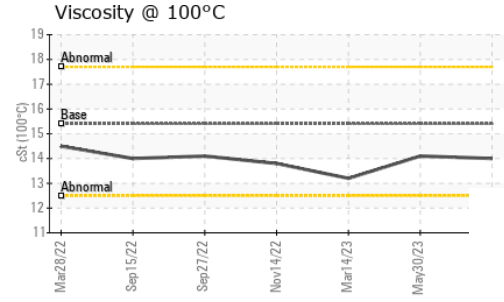
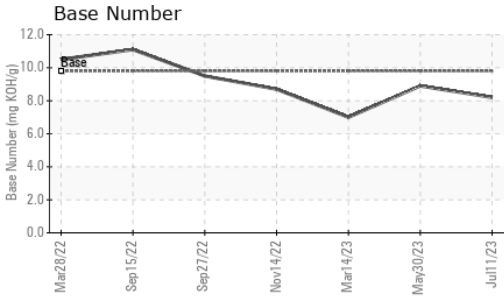
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	0.3	0.5
Nitration	Abs/cm *ASTM D7624 >20	<b>9.1</b>	8.4	9.6
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.1</b>	19.5	23.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.6</b>	15.0	18.8
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.2</b>	8.9	7.0



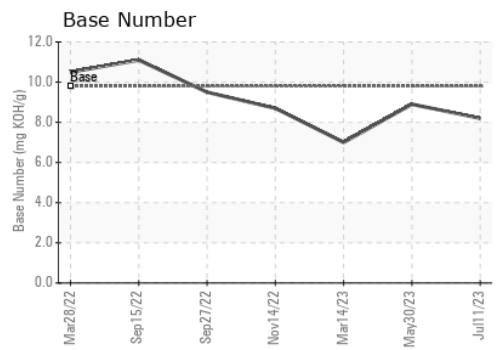
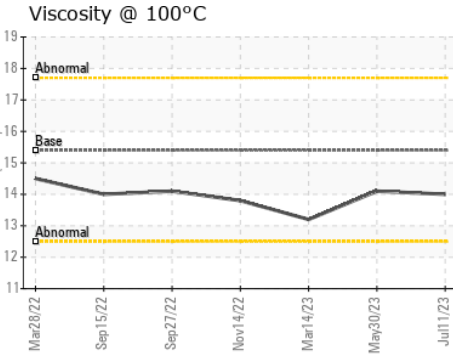
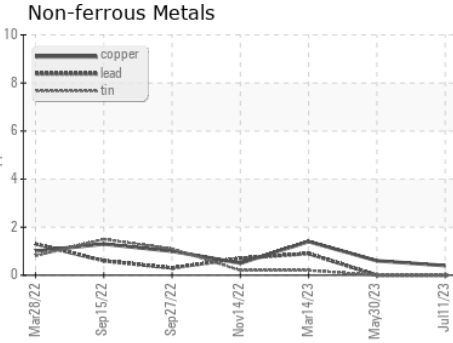
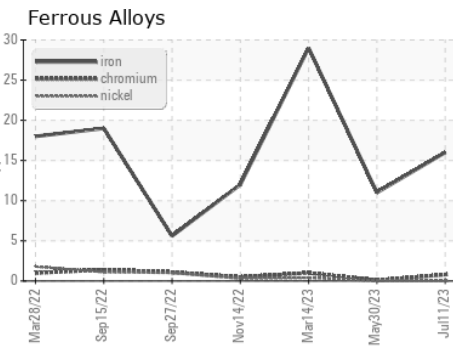
# OIL ANALYSIS REPORT



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>14.0</b>	14.1	13.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0070604 **Received** : 20 Jul 2023  
**Lab Number** : 05903067 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10564423 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 166 - Phenix City**  
 18 Old Brickyard Rd  
 Phenix City, AL  
 US 36869  
 Contact: EDWARD CASHMAN  
 ecashman@gflenv.com  
 T:  
 F:

Certificate L2367  
 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)