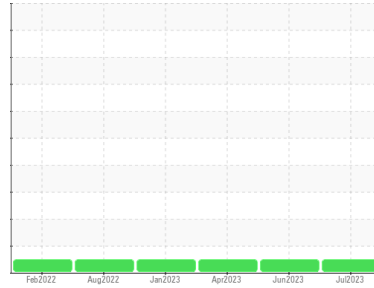




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**427127-275**

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>GFL0070603</b>	GFL0087807	GFL0074921
Sample Date	Client Info		<b>12 Jul 2023</b>	27 Jun 2023	10 Apr 2023
Machine Age	mls	Client Info	<b>240738</b>	235087	25199
Oil Age	mls	Client Info	<b>0</b>	235087	200
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
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>8</b>	7	4
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	2	1
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	0
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>41</b>	44	30
Barium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 60	<b>69</b>	69	57
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>963</b>	795	717
Calcium	ppm	ASTM D5185m 1070	<b>1150</b>	1117	1048
Phosphorus	ppm	ASTM D5185m 1150	<b>1059</b>	991	900
Zinc	ppm	ASTM D5185m 1270	<b>1307</b>	1111	1087
Sulfur	ppm	ASTM D5185m 2060	<b>3876</b>	3026	3401

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m	<b>4</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	2

## INFRA-RED

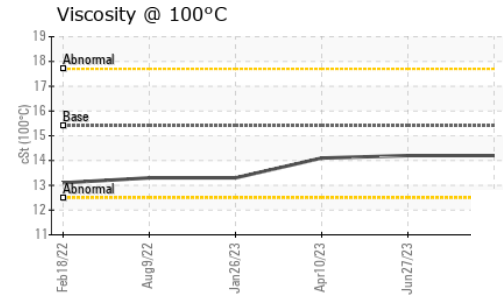
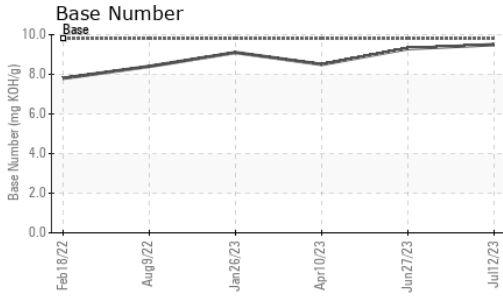
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.2</b>	6.2	5.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.5</b>	19.1	16.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.9</b>	15.3	13.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.5</b>	9.3	8.5



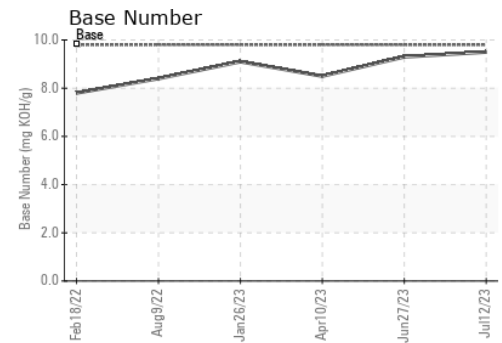
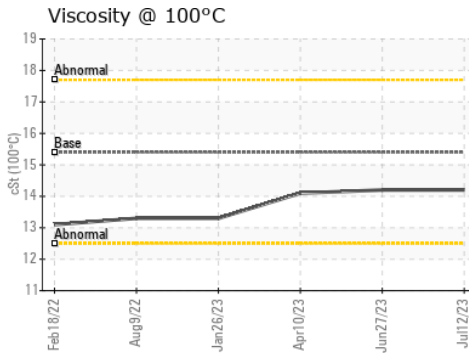
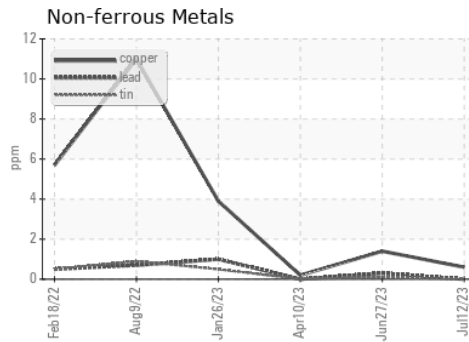
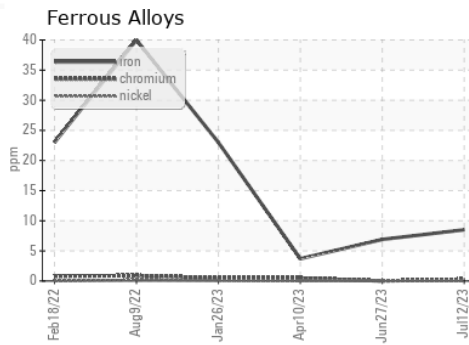
# OIL ANALYSIS REPORT



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>14.2</b>	14.2	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0070603 **Received** : 20 Jul 2023  
**Lab Number** : 05903068 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10564424 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 166 - Phenix City**  
 18 Old Brickyard Rd  
 Phenix City, AL  
 US 36869  
 Contact: DEAN PEACE JR  
 dean.peace@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)

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F: