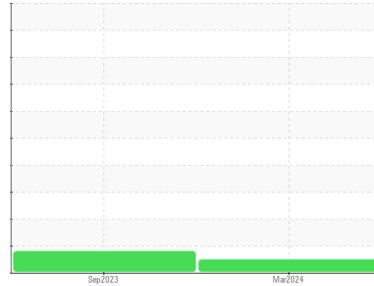




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**934057**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 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>GFL0114481</b>	GFL0093239	---
Sample Date	Client Info		<b>04 Mar 2024</b>	13 Sep 2023	---
Machine Age	mls	Client Info	<b>1772</b>	584	---
Oil Age	mls	Client Info	<b>0</b>	584	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ATTENTION	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	<b>23</b>	46	---
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>9	<b>12</b>	19	---
Lead	ppm	ASTM D5185m	>30	<b>1</b>	3	---
Copper	ppm	ASTM D5185m	>35	<b>2</b>	14	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	<b>6</b>	15	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	50	<b>55</b>	60	---
Manganese	ppm	ASTM D5185m	0	<b>1</b>	14	---
Magnesium	ppm	ASTM D5185m	560	<b>606</b>	825	---
Calcium	ppm	ASTM D5185m	1510	<b>1695</b>	1380	---
Phosphorus	ppm	ASTM D5185m	780	<b>741</b>	710	---
Zinc	ppm	ASTM D5185m	870	<b>1005</b>	968	---
Sulfur	ppm	ASTM D5185m	2040	<b>2871</b>	2682	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	<b>6</b>	32	---
Sodium	ppm	ASTM D5185m		<b>7</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>34</b>	66	---

## INFRA-RED

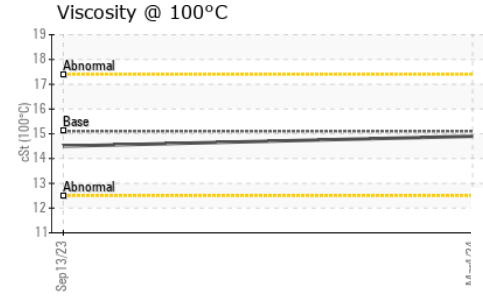
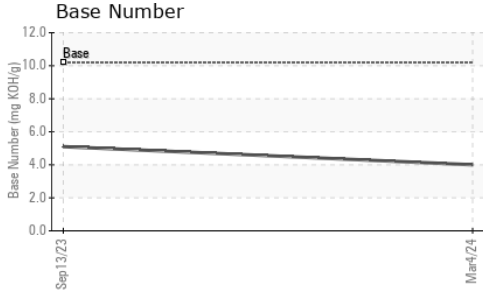
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		<b>0</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.3</b>	10.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	21.9	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.0</b>	5.1	---



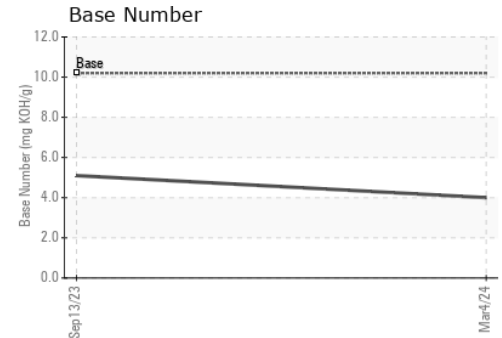
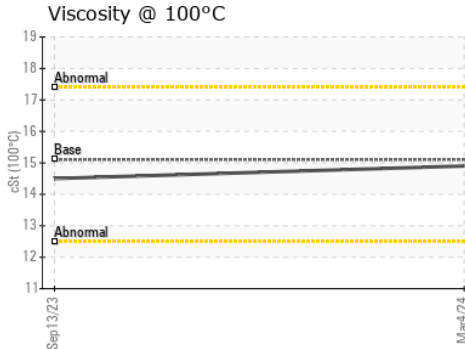
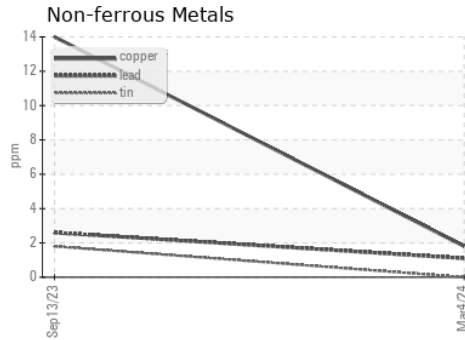
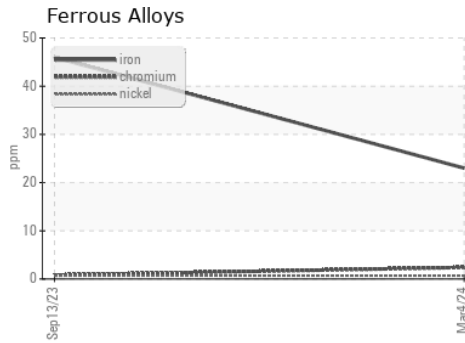
# OIL ANALYSIS REPORT



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.9	14.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114481  
**Lab Number** : 06114979  
**Unique Number** : 10923812  
**Test Package** : FLEET

**Received** : 11 Mar 2024  
**Tested** : 12 Mar 2024  
**Diagnosed** : 13 Mar 2024 - Jonathan Hester

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: Saul Castillo  
 saul.castillo@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)

T:  
F: