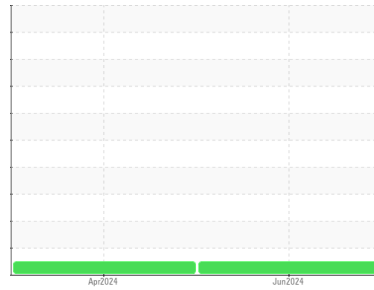




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**734025**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0125240</b>	GFL0117750	---
Sample Date	Client Info	<b>25 Jun 2024</b>	10 Apr 2024	---
Machine Age	hrs	<b>1190</b>	597	---
Oil Age	hrs	<b>593</b>	597	---
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	<b>17</b>	40	---
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	2	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>9	<b>11</b>	10	---
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>35	<b>4</b>	19	---
Tin	ppm	ASTM D5185m	>4	<b>1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	<b>9</b>	14	---
Barium	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	50	<b>57</b>	55	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	12	---
Magnesium	ppm	ASTM D5185m	560	<b>584</b>	687	---
Calcium	ppm	ASTM D5185m	1510	<b>1621</b>	1215	---
Phosphorus	ppm	ASTM D5185m	780	<b>726</b>	675	---
Zinc	ppm	ASTM D5185m	870	<b>988</b>	898	---
Sulfur	ppm	ASTM D5185m	2040	<b>2401</b>	2549	---

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	<b>8</b>	34	---
Sodium	ppm	ASTM D5185m		<b>5</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>48</b>	57	---

## INFRA-RED

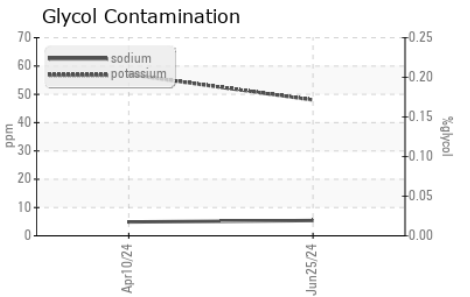
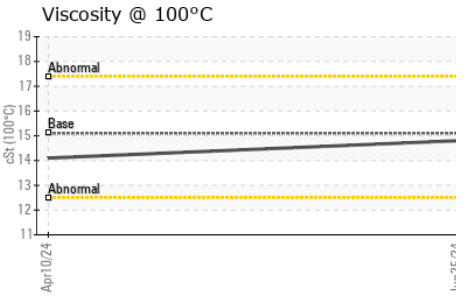
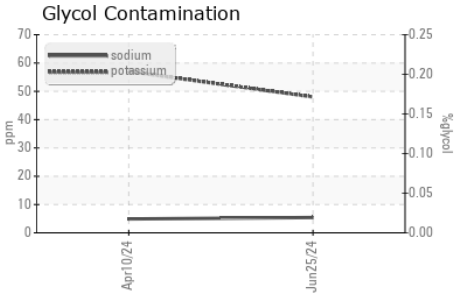
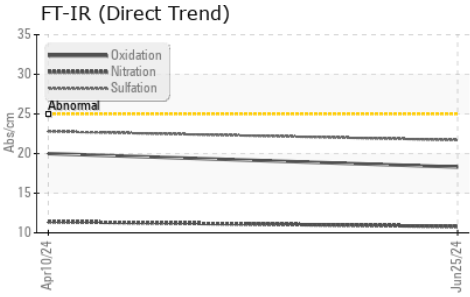
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		<b>0.1</b>	0	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	11.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.7</b>	22.8	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	20.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.6</b>	4.1	---



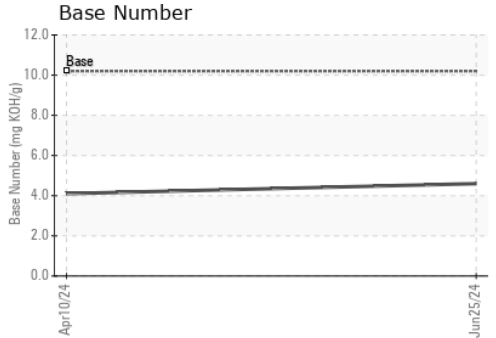
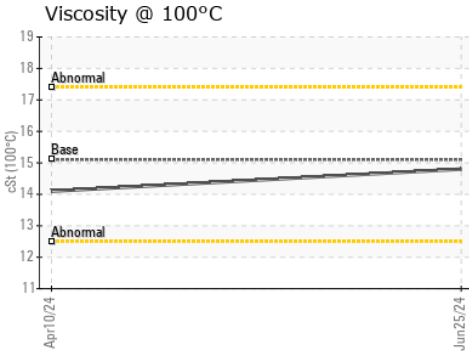
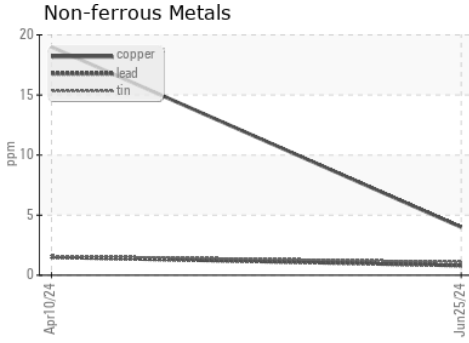
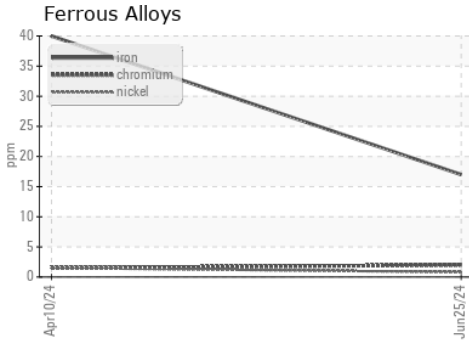
# OIL ANALYSIS REPORT



PARAMETER	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	14.8	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0125240      **Received** : 01 Jul 2024  
**Lab Number** : 06225651      **Tested** : 03 Jul 2024  
**Unique Number** : 11103848      **Diagnosed** : 03 Jul 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX 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)

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F: