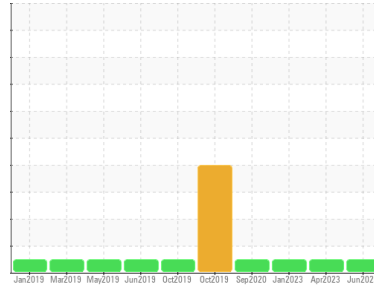




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**949003-205303**

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>GFL0083485</b>	GFL0065137	GFL0065161
Sample Date	Client Info	<b>12 Jun 2023</b>	04 Apr 2023	04 Jan 2023
Machine Age	hrs	<b>19578</b>	18371	125820
Oil Age	hrs	<b>19578</b>	18371	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>2</b>	2	4
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<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 >9	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	7
Copper	ppm	ASTM D5185m >35	<b>0</b>	0	4
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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 50	<b>46</b>	27	24
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>46</b>	45	50
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>573</b>	572	608
Calcium	ppm	ASTM D5185m 1510	<b>1532</b>	1319	1477
Phosphorus	ppm	ASTM D5185m 780	<b>757</b>	701	767
Zinc	ppm	ASTM D5185m 870	<b>922</b>	824	933
Sulfur	ppm	ASTM D5185m 2040	<b>2850</b>	2123	2788
Lithium	ppm	ASTM D5185m	<b>---</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>5</b>	4	3
Sodium	ppm	ASTM D5185m	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	0

## INFRA-RED

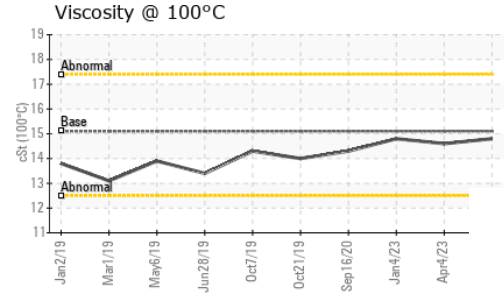
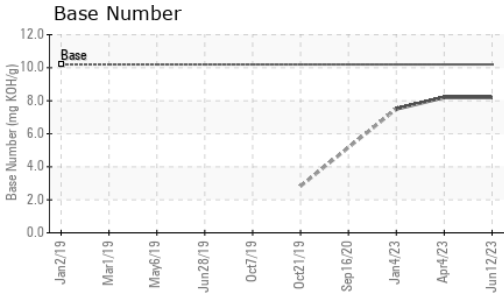
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.6</b>	6.9	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.8</b>	18.9	20.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.2</b>	15.2	16.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.2</b>	8.2	7.5



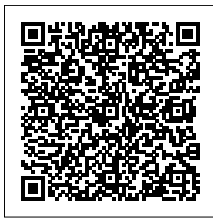
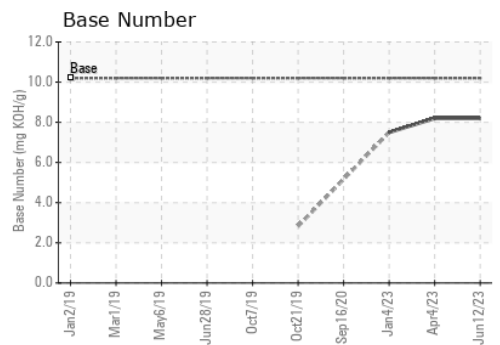
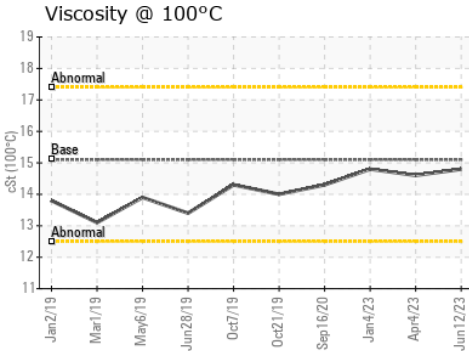
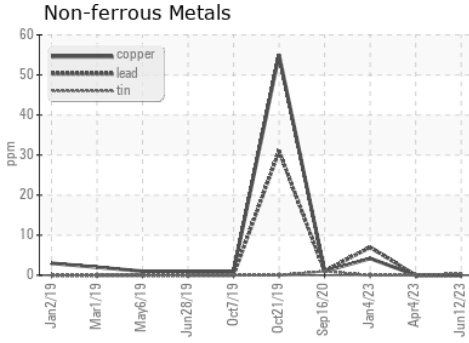
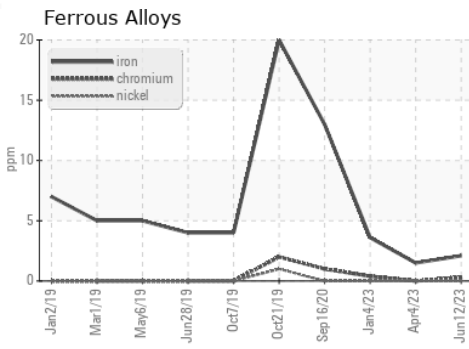
# OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.8</b>	14.6	14.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0083485 **Received** : 23 Jun 2023  
**Lab Number** : 05881865 **Diagnosed** : 27 Jun 2023  
**Unique Number** : 10532348 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

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