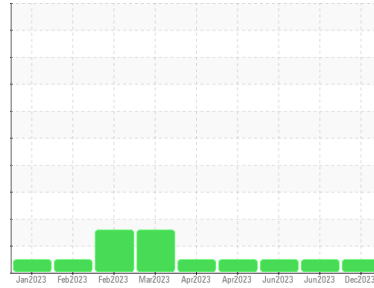




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**733003**

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>GFL0092081</b>	GFL0084690	GFL0084681
Sample Date	Client Info		<b>18 Dec 2023</b>	12 Jun 2023	07 Jun 2023
Machine Age	hrs	Client Info	<b>2881</b>	12428	12147
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>7</b>	12	11
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>1</b>	3	<1
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >35	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>11</b>	25	29
Barium	ppm	ASTM D5185m 5	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>43</b>	51	53
Manganese	ppm	ASTM D5185m 0	<b>2</b>	2	1
Magnesium	ppm	ASTM D5185m 560	<b>698</b>	642	638
Calcium	ppm	ASTM D5185m 1510	<b>1462</b>	1618	1627
Phosphorus	ppm	ASTM D5185m 780	<b>644</b>	802	815
Zinc	ppm	ASTM D5185m 870	<b>933</b>	1003	984
Sulfur	ppm	ASTM D5185m 2040	<b>2018</b>	3067	3059

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>19</b>	6	6
Sodium	ppm	ASTM D5185m	<b>8</b>	5	5
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	<1

## INFRA-RED

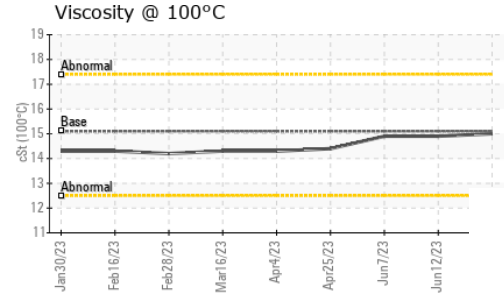
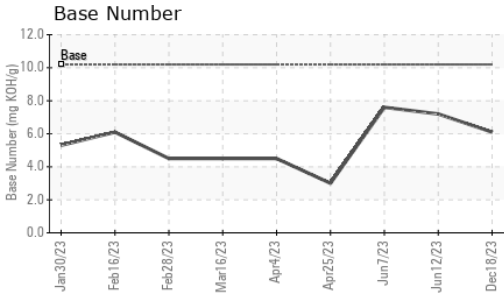
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	8.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.0</b>	20.5	20.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>28.5</b>	18.4	18.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>6.1</b>	7.2	7.6



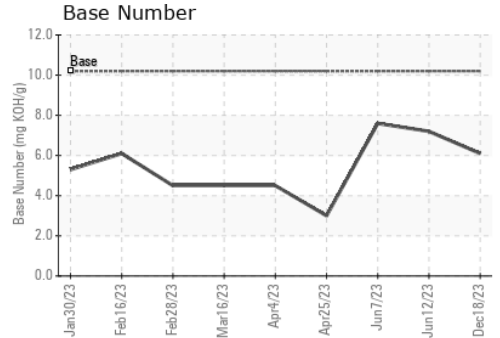
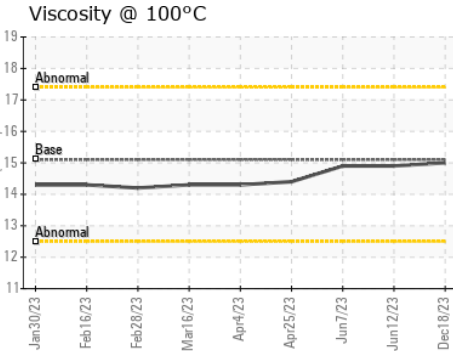
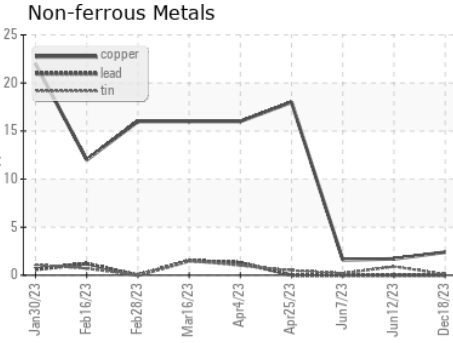
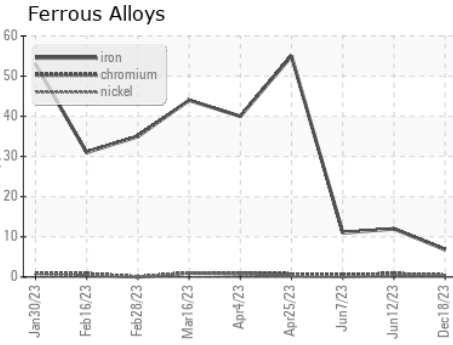
# OIL ANALYSIS REPORT



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>15.0</b>	14.9	14.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092081 **Received** : 22 Dec 2023  
**Lab Number** : **06043892** **Diagnosed** : 27 Dec 2023  
**Unique Number** : 10804500 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Gino Griego

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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