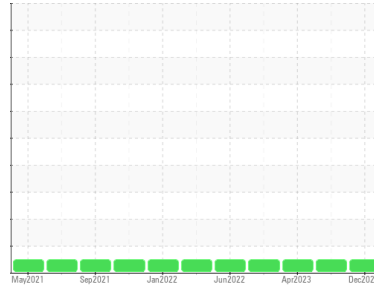




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**749003**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

## 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>GFL0106958</b>	GFL0089712	GFL0077348
Sample Date	Client Info		<b>16 Dec 2023</b>	08 Sep 2023	28 Apr 2023
Machine Age	hrs	Client Info	<b>12216</b>	11476	10493
Oil Age	hrs	Client Info	<b>740</b>	983	1139
Oil Changed	Client Info		<b>Changed</b>	Changed	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>0</b>	4	14
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	1
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	<1	<1
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>21</b>	27	4
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>47</b>	51	73
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>579</b>	595	580
Calcium	ppm	ASTM D5185m 1510	<b>1442</b>	1656	1523
Phosphorus	ppm	ASTM D5185m 780	<b>800</b>	792	711
Zinc	ppm	ASTM D5185m 870	<b>974</b>	984	976
Sulfur	ppm	ASTM D5185m 2040	<b>2478</b>	2975	2559

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>2</b>	3	4
Sodium	ppm	ASTM D5185m	<b>2</b>	5	6
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	3

## INFRA-RED

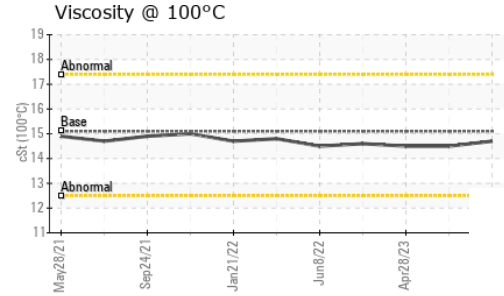
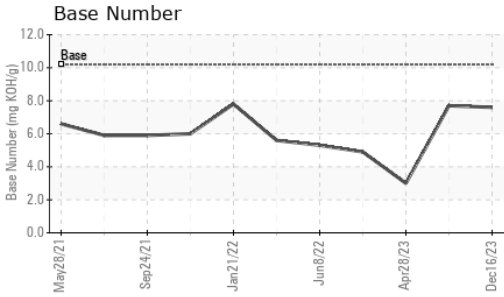
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.4</b>	8.1	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.5</b>	18.2	20.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.1</b>	15.6	17.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.6</b>	7.7	3.0



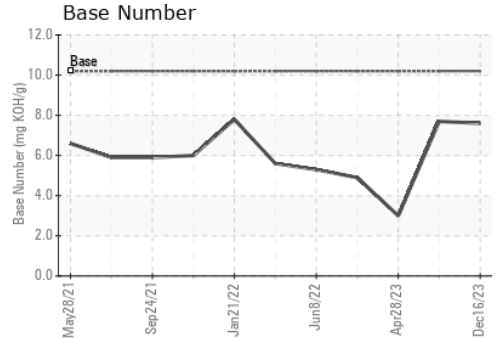
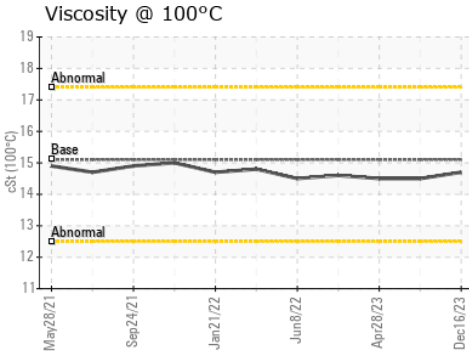
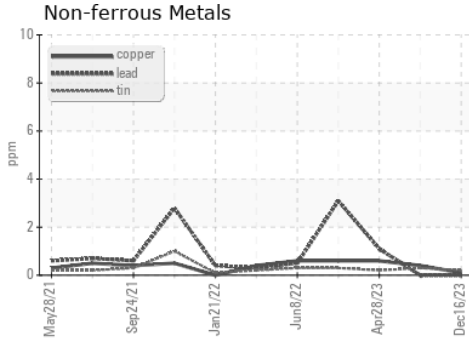
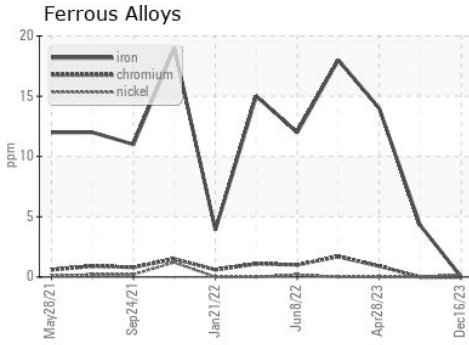
# OIL ANALYSIS REPORT



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>14.7</b>	14.5	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106958 **Received** : 21 Dec 2023  
**Lab Number** : 06041893 **Diagnosed** : 22 Dec 2023  
**Unique Number** : 10802501 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 882 - Gainesville**  
 5002 SW 41st Blvd  
 Gainesville, FL  
 US 32608  
 Contact: ROBERT CLARK  
 robert.clark@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)