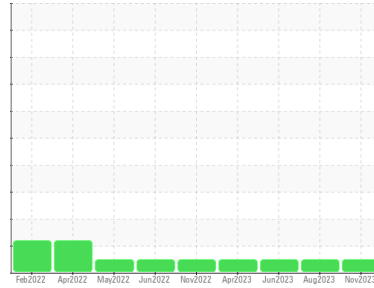




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**832002**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (5 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0098110</b>	GFL0088558	GFL0083287
Sample Date	Client Info		<b>01 Nov 2023</b>	03 Aug 2023	20 Jun 2023
Machine Age	hrs	Client Info	<b>724</b>	724	724
Oil Age	hrs	Client Info	<b>520</b>	451	451
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>10</b>	8	10
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</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>1</b>	2	2
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>1</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>8</b>	8	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>60</b>	52	54
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>597</b>	613	588
Calcium	ppm	ASTM D5185m 1510	<b>1729</b>	1702	1739
Phosphorus	ppm	ASTM D5185m 780	<b>678</b>	732	742
Zinc	ppm	ASTM D5185m 870	<b>1049</b>	1028	1012
Sulfur	ppm	ASTM D5185m 2040	<b>2819</b>	2913	2846

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>5</b>	4	5
Sodium	ppm	ASTM D5185m	<b>5</b>	9	11
Potassium	ppm	ASTM D5185m >20	<b>18</b>	18	10

## INFRA-RED

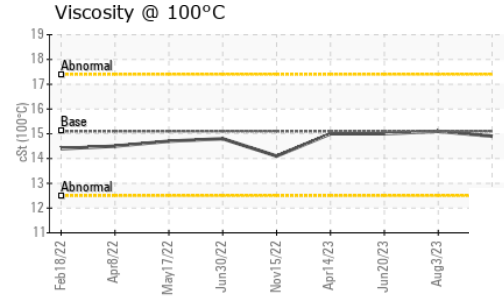
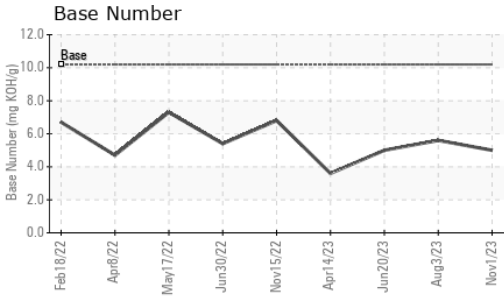
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.5</b>	10.8	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.1</b>	20.9	23.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.3</b>	18.1	19.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.0</b>	5.6	5.0



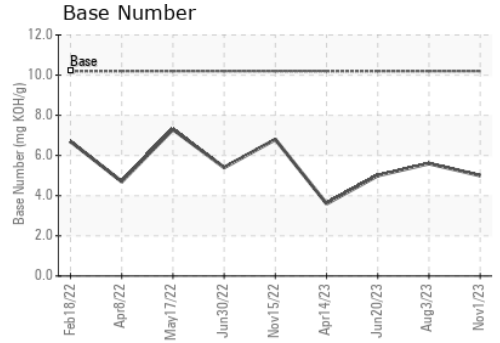
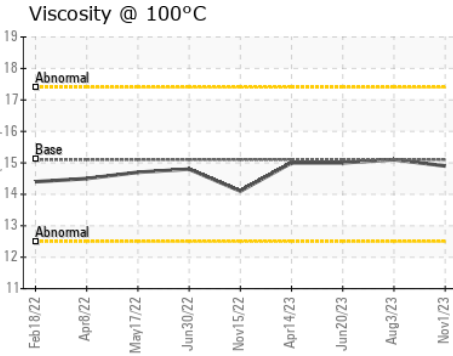
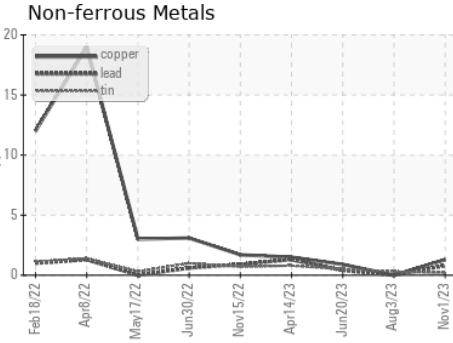
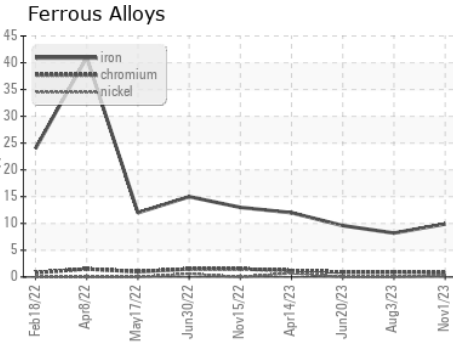
# OIL ANALYSIS REPORT



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>14.9</b>	15.1	15.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098110 **Received** : 02 Nov 2023  
**Lab Number** : **05997291** **Diagnosed** : 03 Nov 2023  
**Unique Number** : 10725651 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 017 - Durham**  
 148 Stone Park Court  
 Durham, NC  
 US 27703  
 Contact: Shane Parks  
 shane.parks@gflenv.com  
 T: (919)596-1363  
 F: (919)598-1852

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)