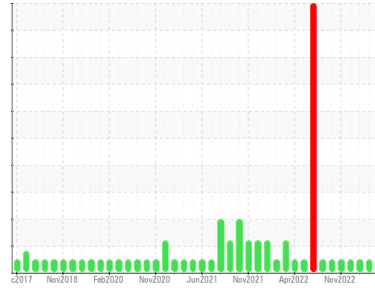




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10639C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (36 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>GFL0087741</b>	GFL0082232	GFL0062767
Sample Date	Client Info	<b>01 Sep 2023</b>	22 Jun 2023	16 Mar 2023
Machine Age	hrs	<b>17152</b>	16496	0
Oil Age	hrs	<b>2328</b>	1672	15924
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>36</b>	15	31
Chromium	ppm	ASTM D5185m >4	<b>5</b>	2	5
Nickel	ppm	ASTM D5185m >2	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>4</b>	1	4
Lead	ppm	ASTM D5185m >30	<b>3</b>	<1	4
Copper	ppm	ASTM D5185m >35	<b>7</b>	5	3
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>0</b>	5	4
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>64</b>	58	56
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>658</b>	564	542
Calcium	ppm	ASTM D5185m 1510	<b>1898</b>	1672	1672
Phosphorus	ppm	ASTM D5185m 780	<b>813</b>	719	689
Zinc	ppm	ASTM D5185m 870	<b>1051</b>	1034	870
Sulfur	ppm	ASTM D5185m 2040	<b>2915</b>	2766	2647

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>13</b>	12	5
Sodium	ppm	ASTM D5185m	<b>34</b>	16	73
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	2

## INFRA-RED

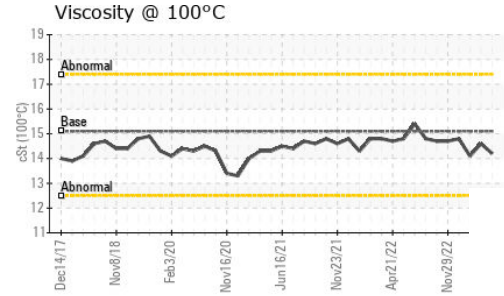
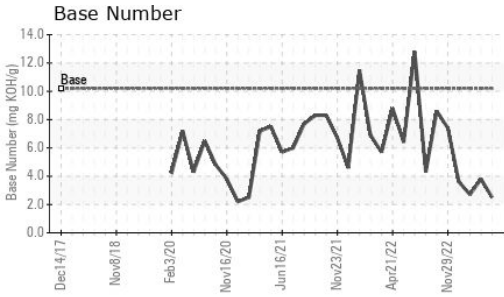
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.5</b>	10.7	14.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.8</b>	22.0	27.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>24.6</b>	19.3	22.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>2.5</b>	3.8	2.7



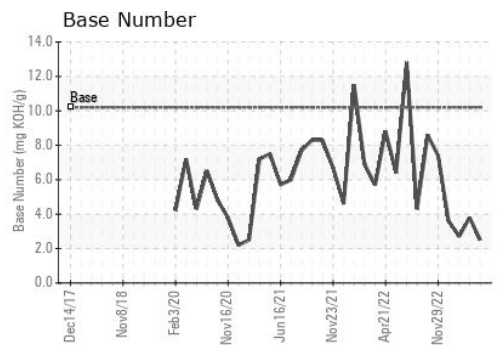
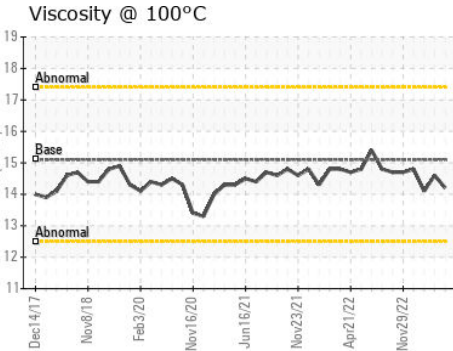
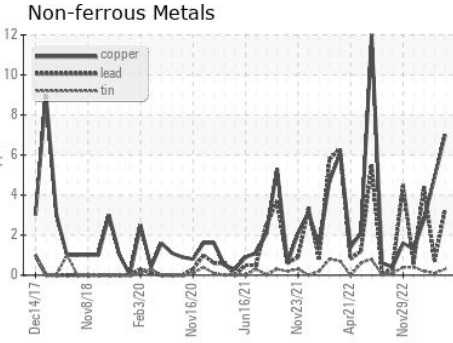
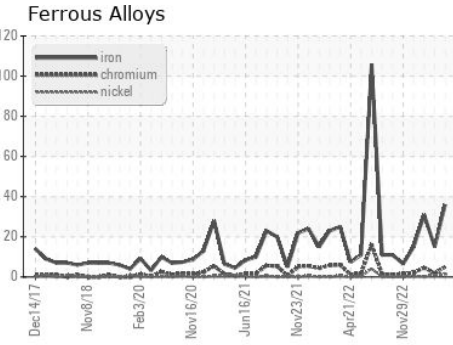
# OIL ANALYSIS REPORT



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>14.2</b>	14.6	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0087741 **Received** : 05 Sep 2023  
**Lab Number** : **05942000** **Diagnosed** : 07 Sep 2023  
**Unique Number** : 10632612 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 006 - Wilmington**  
 3618 US Highway 421 N  
 Wilmington, NC  
 US 28401  
 Contact: Eric Wood  
 eric.wood@gflenv.com  
 T: (717)723-1956  
 F: (910)762-6880

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)