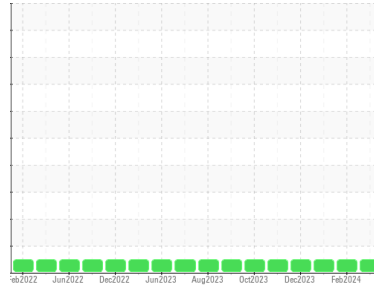




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**731117**

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>GFL0109800</b>	GFL0109858	GFL0103304
Sample Date	Client Info	<b>28 Feb 2024</b>	06 Feb 2024	16 Jan 2024
Machine Age	hrs	<b>6216</b>	6092	5943
Oil Age	hrs	<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>23</b>	8	18
Chromium	ppm ASTM D5185m >4	<b>2</b>	<1	1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185m	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>4</b>	1	2
Lead	ppm ASTM D5185m >30	<b>16</b>	3	8
Copper	ppm ASTM D5185m >35	<b>3</b>	1	<1
Tin	ppm ASTM D5185m >4	<b>2</b>	1	<1
Vanadium	ppm ASTM D5185m	<b>0</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>13</b>	16	6
Barium	ppm ASTM D5185m 5	<b>0</b>	0	3
Molybdenum	ppm ASTM D5185m 50	<b>63</b>	50	59
Manganese	ppm ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm ASTM D5185m 560	<b>661</b>	544	651
Calcium	ppm ASTM D5185m 1510	<b>1776</b>	1541	1691
Phosphorus	ppm ASTM D5185m 780	<b>859</b>	792	798
Zinc	ppm ASTM D5185m 870	<b>1138</b>	956	1068
Sulfur	ppm ASTM D5185m 2040	<b>2470</b>	2451	2872

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>5</b>	4	6
Sodium	ppm ASTM D5185m	<b>8</b>	7	7
Potassium	ppm ASTM D5185m >20	<b>1</b>	0	2

## INFRA-RED

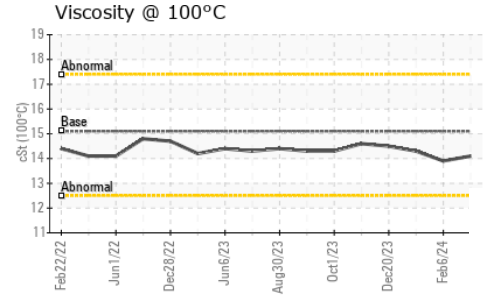
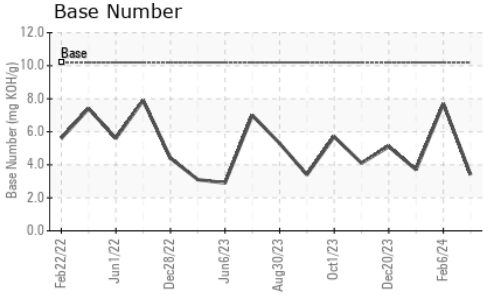
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm *ASTM D7624 >20	<b>13.5</b>	10.7	12.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>28.3</b>	19.5	25.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>23.2</b>	16.7	20.0
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>3.4</b>	7.7	3.7



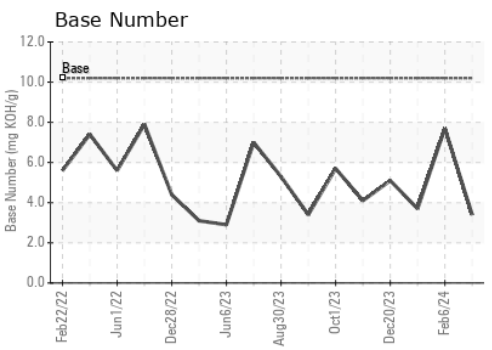
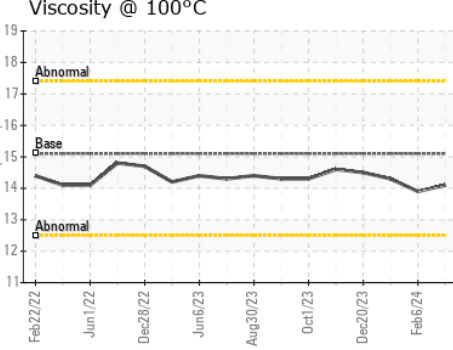
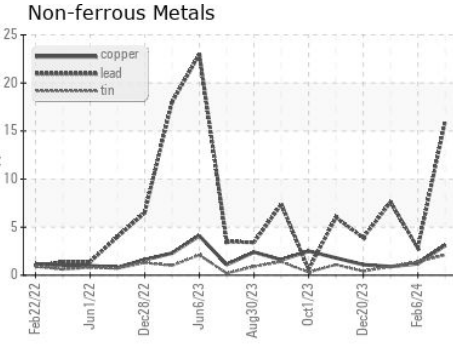
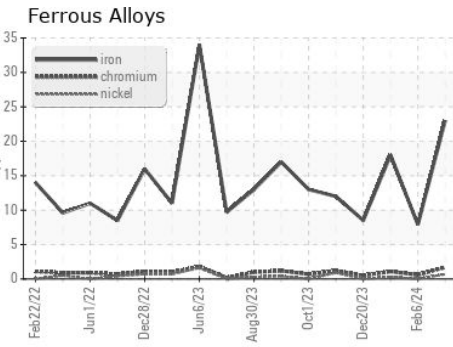
# OIL ANALYSIS REPORT



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>14.1</b>	13.9	14.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109800      **Received** : 01 Mar 2024  
**Lab Number** : **06105854**      **Tested** : 02 Mar 2024  
**Unique Number** : 10909351      **Diagnosed** : 04 Mar 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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)

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F: