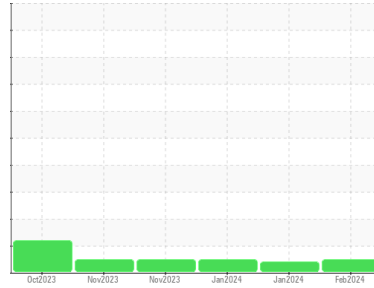




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**834052**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- 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>GFL0109845</b>	GFL0103316	GFL0099934
Sample Date	Client Info		<b>26 Feb 2024</b>	22 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info	<b>638</b>	480	410
Oil Age	hrs	Client Info	<b>0</b>	0	410
Oil Changed	Client Info		<b>Not Changed</b>	Not Changd	Not Changed
Sample Status			<b>NORMAL</b>	ATTENTION	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>12</b>	19	11
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	4	2
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m >150	<b>2</b>	5	2
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>29</b>	15	24
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>50</b>	42	57
Manganese	ppm	ASTM D5185m 0	<b>2</b>	2	<1
Magnesium	ppm	ASTM D5185m 560	<b>557</b>	532	572
Calcium	ppm	ASTM D5185m 1510	<b>1536</b>	1575	1644
Phosphorus	ppm	ASTM D5185m 780	<b>794</b>	718	823
Zinc	ppm	ASTM D5185m 870	<b>993</b>	878	1010
Sulfur	ppm	ASTM D5185m 2040	<b>2794</b>	2179	2513

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	9	4
Sodium	ppm	ASTM D5185m	<b>2</b>	7	8
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	0

## INFRA-RED

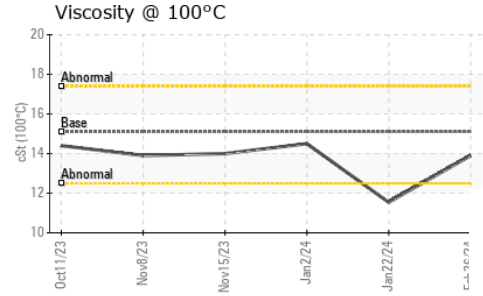
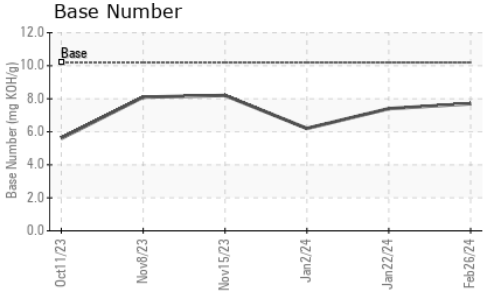
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	10.7	9.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.7</b>	18.9	19.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.5</b>	16.4	16.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.7</b>	7.4	6.2



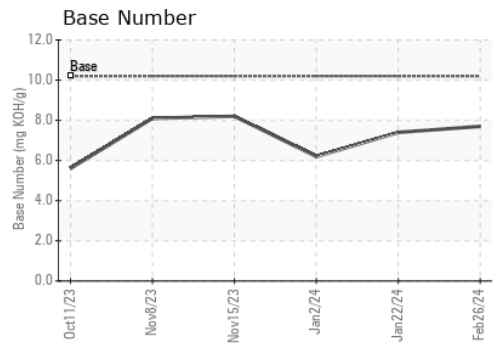
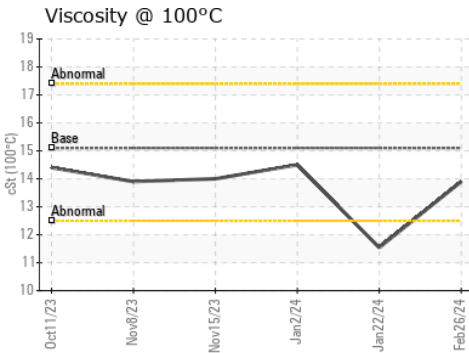
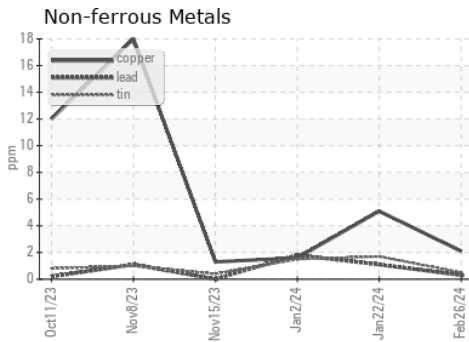
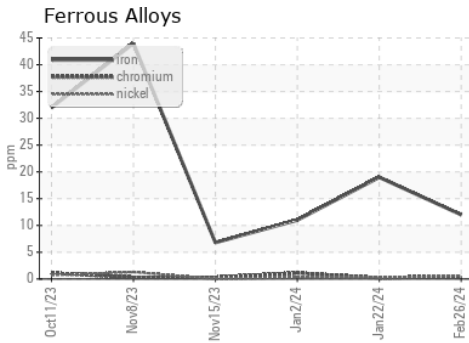
# OIL ANALYSIS REPORT



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	13.9	11.54	14.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109845  
**Lab Number** : 06102810  
**Unique Number** : 10901040  
**Test Package** : FLEET

**Received** : 28 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**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: