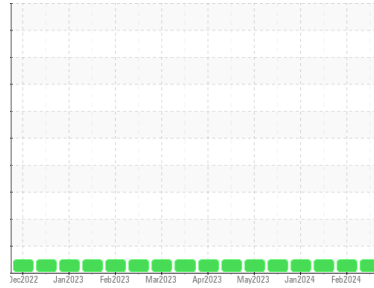




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**933024**

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>GFL0109810</b>	GFL0109834	GFL0103300
Sample Date	Client Info		<b>26 Feb 2024</b>	08 Feb 2024	19 Jan 2024
Machine Age	hrs	Client Info	<b>2573</b>	2461	2317
Oil Age	hrs	Client Info	<b>1200</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
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>14</b>	6	6
Chromium	ppm	ASTM D5185m >4	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
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>5</b>	1	2
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>21</b>	20	24
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>76</b>	46	49
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m 560	<b>839</b>	537	569
Calcium	ppm	ASTM D5185m 1510	<b>2453</b>	1606	1607
Phosphorus	ppm	ASTM D5185m 780	<b>1167</b>	770	808
Zinc	ppm	ASTM D5185m 870	<b>1556</b>	945	977
Sulfur	ppm	ASTM D5185m 2040	<b>4480</b>	2551	2638

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>23</b>	12	13
Sodium	ppm	ASTM D5185m	<b>9</b>	4	5
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	<1

## INFRA-RED

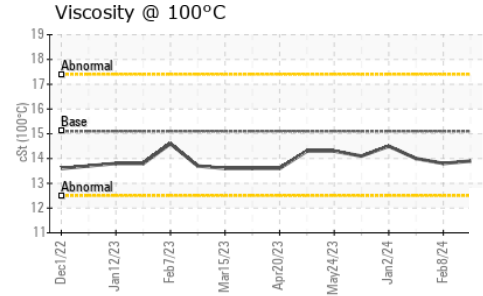
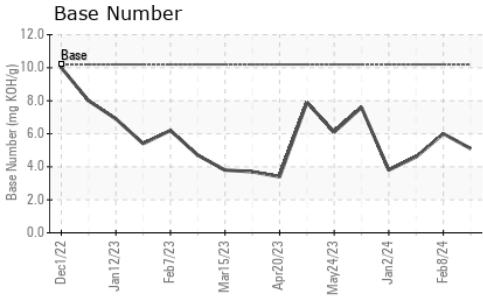
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.3</b>	9.7	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.3</b>	19.8	18.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.7</b>	16.5	15.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.1</b>	6.0	4.6



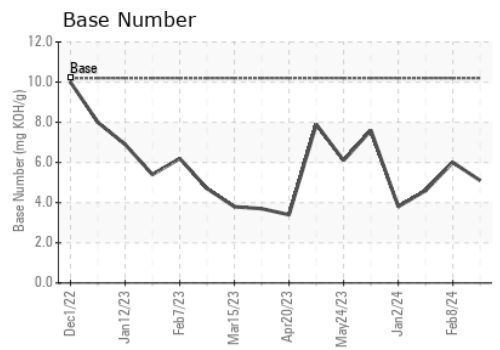
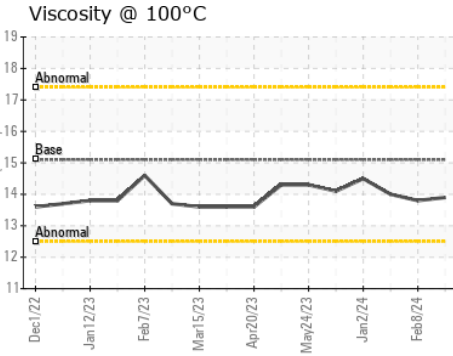
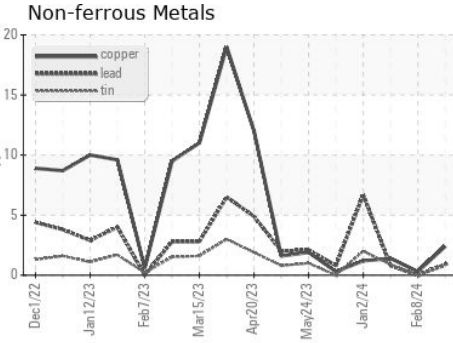
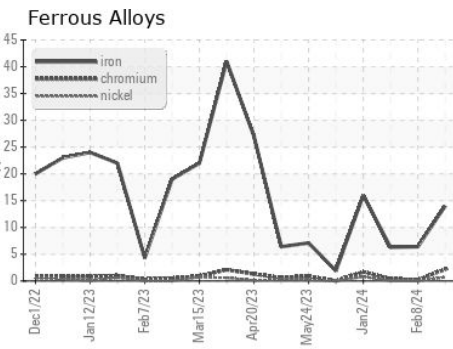
# OIL ANALYSIS REPORT



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>13.9</b>	13.8	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109810      **Received** : 28 Feb 2024  
**Lab Number** : **06102820**      **Tested** : 29 Feb 2024  
**Unique Number** : 10901050      **Diagnosed** : 29 Feb 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)