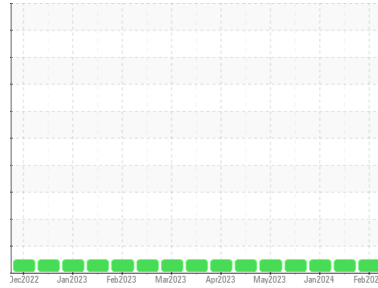




# OIL ANALYSIS REPORT

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>GFL0109834</b>	GFL0103300	GFL0099927
Sample Date	Client Info	<b>08 Feb 2024</b>	19 Jan 2024	02 Jan 2024
Machine Age	hrs	<b>2461</b>	2317	2176
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>6</b>	6	16
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	2
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
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>0</b>	<1	7
Copper	ppm ASTM D5185m >35	<b>&lt;1</b>	1	1
Tin	ppm ASTM D5185m >4	<b>0</b>	<1	2
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>20</b>	24	11
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>46</b>	49	61
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 560	<b>537</b>	569	627
Calcium	ppm ASTM D5185m 1510	<b>1606</b>	1607	1815
Phosphorus	ppm ASTM D5185m 780	<b>770</b>	808	835
Zinc	ppm ASTM D5185m 870	<b>945</b>	977	1060
Sulfur	ppm ASTM D5185m 2040	<b>2551</b>	2638	2484

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>12</b>	13	5
Sodium	ppm ASTM D5185m	<b>4</b>	5	10
Potassium	ppm ASTM D5185m >20	<b>0</b>	<1	0

## INFRA-RED

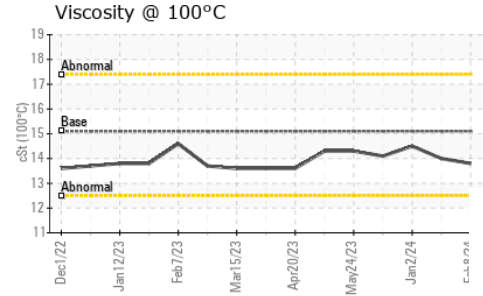
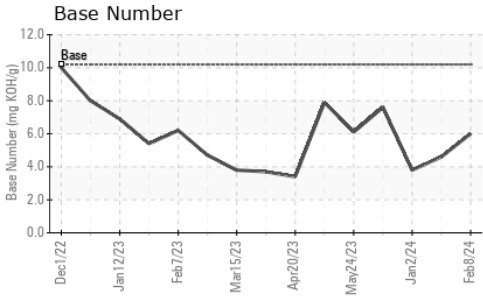
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>9.7</b>	8.5	13.1
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.8</b>	18.5	27.0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.5</b>	15.7	23.7
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>6.0</b>	4.6	3.8



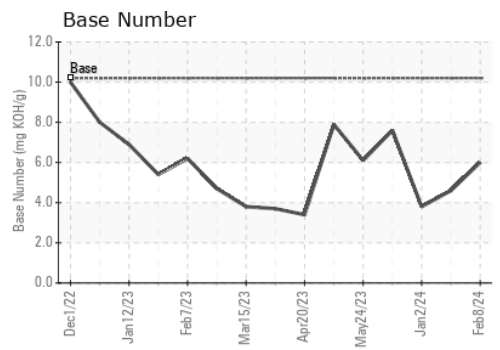
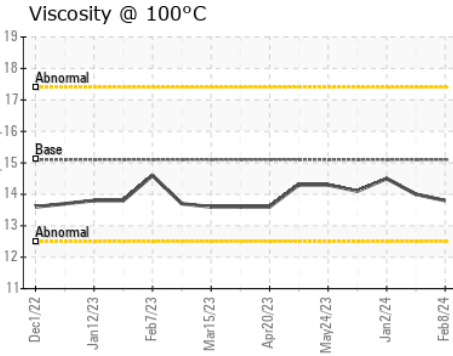
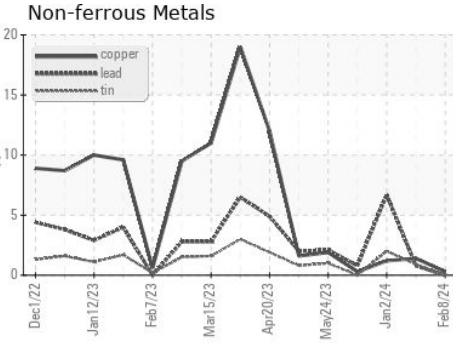
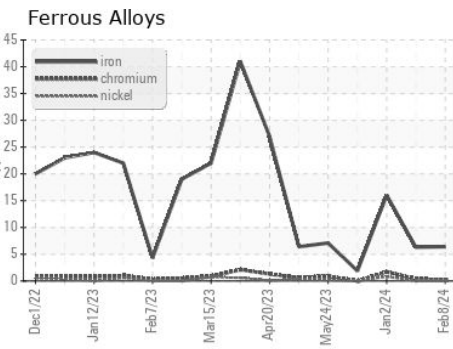
# OIL ANALYSIS REPORT



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>13.8</b>	14.0	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109834 **Received** : 12 Feb 2024  
**Lab Number** : 06085659 **Tested** : 12 Feb 2024  
**Unique Number** : 10873104 **Diagnosed** : 12 Feb 2024 - Wes Davis  
**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)