



# OIL ANALYSIS REPORT

Sample Rating Trend

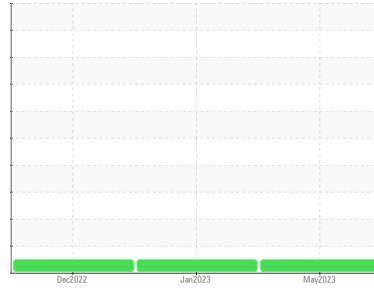
**NORMAL**



Machine Id  
**845004-101219**

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>GFL0052585</b>	GFL0050194	GFL0047306
Sample Date	Client Info		<b>01 May 2023</b>	04 Jan 2023	23 Dec 2022
Machine Age	hrs	Client Info	<b>18288</b>	18066	18001
Oil Age	hrs	Client Info	<b>208</b>	800	900
Oil Changed	Client Info		<b>Not Changed</b>	Not Changd	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>13</b>	6	25
Chromium	ppm	ASTM D5185m >4	<b>0</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>1</b>	1	3
Lead	ppm	ASTM D5185m >30	<b>0</b>	2	22
Copper	ppm	ASTM D5185m >35	<b>0</b>	<1	2
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	4
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>26</b>	32	8
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>54</b>	55	69
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m 560	<b>608</b>	569	671
Calcium	ppm	ASTM D5185m 1510	<b>1691</b>	1648	1786
Phosphorus	ppm	ASTM D5185m 780	<b>838</b>	873	842
Zinc	ppm	ASTM D5185m 870	<b>1038</b>	988	1141
Sulfur	ppm	ASTM D5185m 2040	<b>2822</b>	3104	3029

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	5	6
Sodium	ppm	ASTM D5185m	<b>8</b>	6	12
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	4

## INFRA-RED

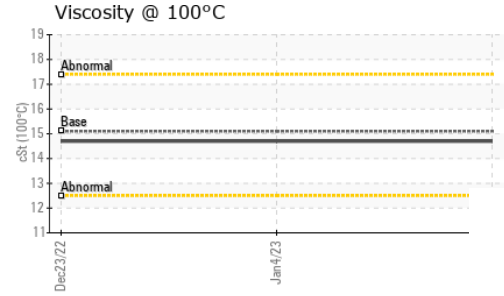
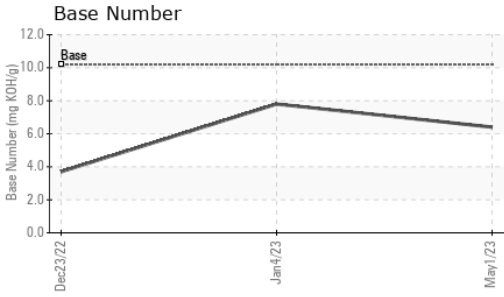
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	7.4	13.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.4</b>	19.4	28.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.4</b>	16.0	23.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>6.4</b>	7.8	3.7



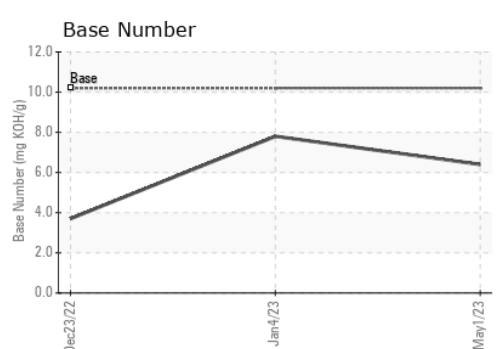
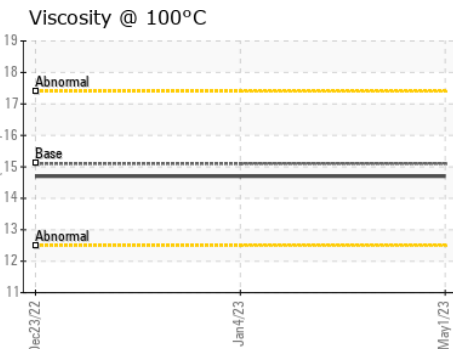
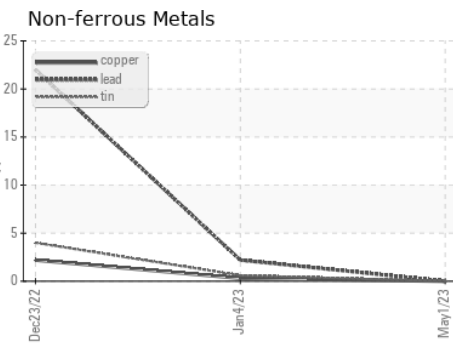
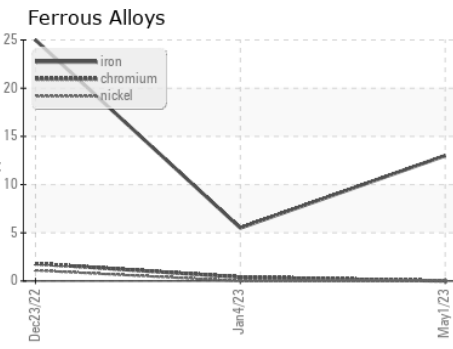
# OIL ANALYSIS REPORT



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	14.7	14.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0052585 **Received** : 02 May 2023  
**Lab Number** : 05835858 **Diagnosed** : 03 May 2023  
**Unique Number** : 10454661 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 884 - Lake County - Tavares**  
 321 Southridge Industrial Way  
 Tavares, FL  
 US 32778  
 Contact: RON FERAGOTTI

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)

T:  
F: