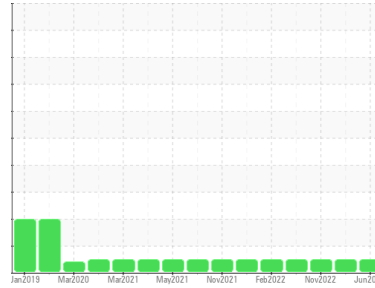




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2711C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (40 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	history 1	history 2
Sample Number	Client Info	<b>GFL0048079</b>	GFL0048085	GFL0058886
Sample Date	Client Info	<b>20 Jun 2023</b>	26 May 2023	29 Nov 2022
Machine Age	hrs	<b>3971</b>	3971	0
Oil Age	hrs	<b>3719</b>	3719	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	<b>15</b>	6	30
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	3
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>6</b>	5	7
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	3	<1
Copper	ppm	ASTM D5185m >35	<b>1</b>	<1	3
Tin	ppm	ASTM D5185m >4	<b>&lt;1</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	history 1	history 2	
Boron	ppm	ASTM D5185m 50	<b>35</b>	16	7
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>50</b>	54	57
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>653</b>	639	561
Calcium	ppm	ASTM D5185m 1510	<b>1478</b>	1642	1647
Phosphorus	ppm	ASTM D5185m 780	<b>817</b>	820	690
Zinc	ppm	ASTM D5185m 870	<b>1004</b>	1088	967
Sulfur	ppm	ASTM D5185m 2040	<b>3070</b>	2763	2747

## CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	<b>55</b>	4	7
Sodium	ppm	ASTM D5185m	<b>5</b>	6	37
Potassium	ppm	ASTM D5185m >20	<b>3</b>	13	<1

## INFRA-RED

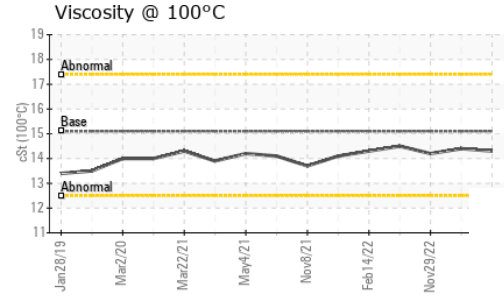
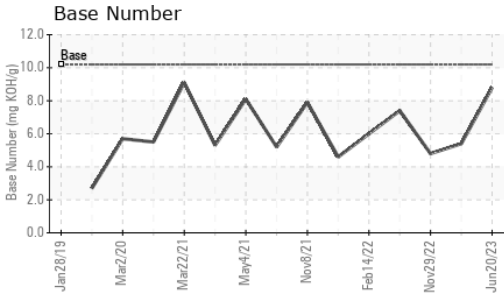
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	11.1	12.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.0</b>	24.2	23.5

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.5</b>	19.6	19.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.8</b>	5.4	4.8



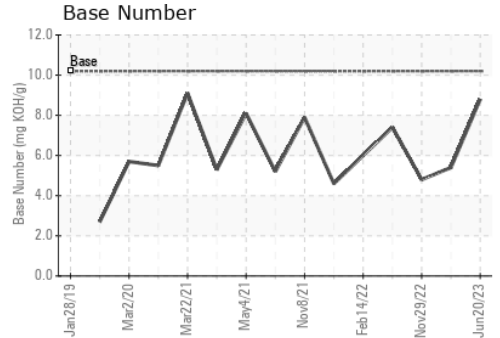
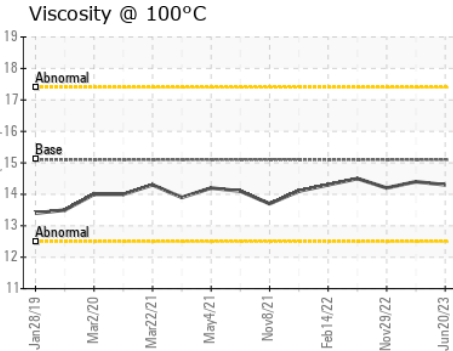
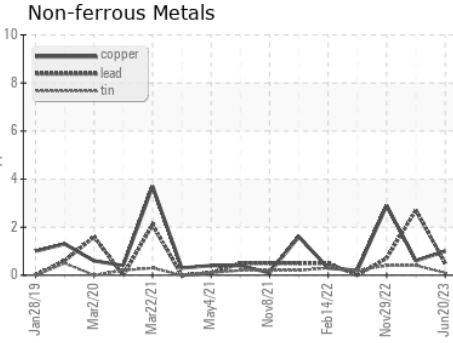
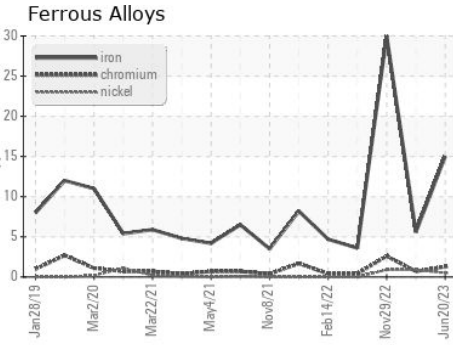
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.3</b>	14.4	14.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0048079     **Received** : 21 Jun 2023  
**Lab Number** : **05879302**     **Diagnosed** : 22 Jun 2023  
**Unique Number** : 10524405     **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 019 - Greenville/TriEast**  
 415 Staton Road  
 Greenville, NC  
 US 27834  
 Contact: Spencer Ligon  
 spencer.ligon@gflenv.com  
 T: (800)207-6618  
 F:

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)