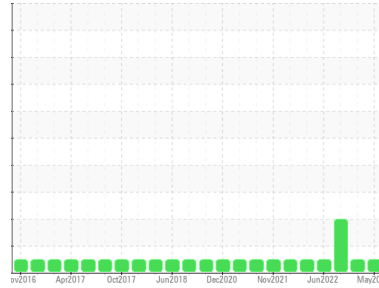




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2645C**  
 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>GFL0058811</b>	GFL0058790	GFL0058879
Sample Date	Client Info		<b>05 May 2023</b>	20 Jan 2023	10 Nov 2022
Machine Age	hrs	Client Info	<b>8365</b>	8365	0
Oil Age	hrs	Client Info	<b>8365</b>	8365	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>4</b>	6	10
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
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>0</b>	2	5
Lead	ppm	ASTM D5185m >30	<b>2</b>	11	2
Copper	ppm	ASTM D5185m >35	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	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>13</b>	8	16
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>54</b>	54	54
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>572</b>	616	538
Calcium	ppm	ASTM D5185m 1510	<b>1479</b>	1647	1544
Phosphorus	ppm	ASTM D5185m 780	<b>680</b>	745	714
Zinc	ppm	ASTM D5185m 870	<b>972</b>	1045	963
Sulfur	ppm	ASTM D5185m 2040	<b>2994</b>	2986	2855

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	4	13
Sodium	ppm	ASTM D5185m	<b>21</b>	6	12
Potassium	ppm	ASTM D5185m >20	<b>6</b>	1	4

## INFRA-RED

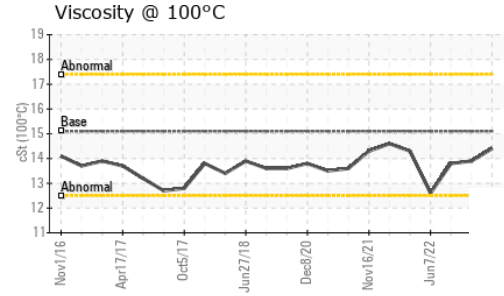
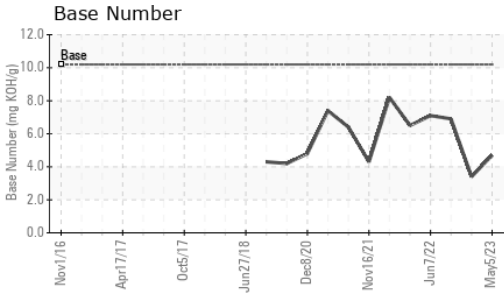
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.9</b>	11.9	11.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.9</b>	26.0	23.4

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.7</b>	21.6	18.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.7</b>	3.4	6.9



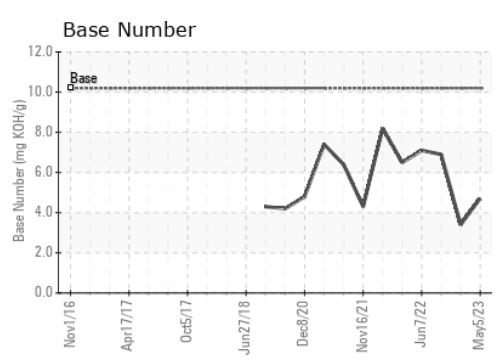
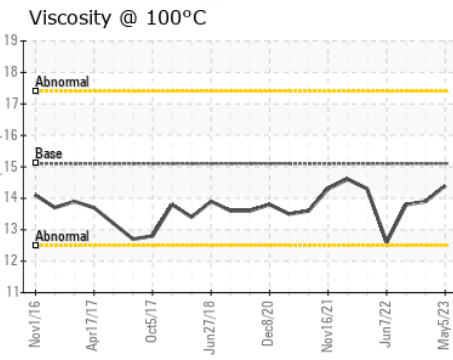
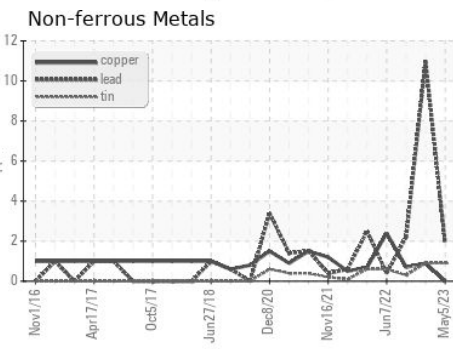
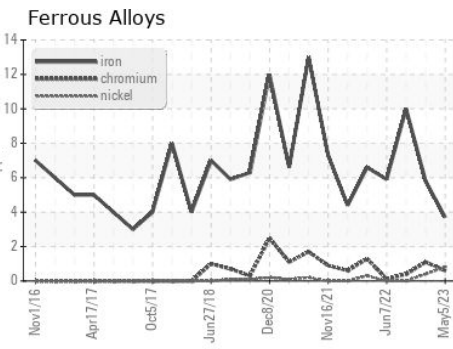
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	▲ MODER
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.4</b>	13.9	13.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0058811 **Received** : 10 May 2023  
**Lab Number** : **05842964** **Diagnosed** : 11 May 2023  
**Unique Number** : 10467071 **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:

Certificate L2367  
 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)