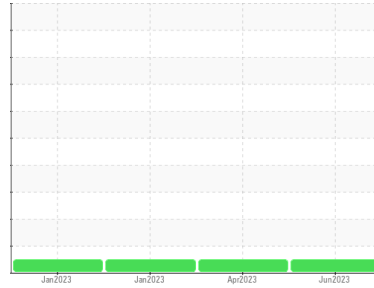




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**932029**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0047434</b>	GFL0070778	GFL0068509	
Sample Date	Client Info	<b>27 Jun 2023</b>	21 Apr 2023	31 Jan 2023	
Machine Age	mls	Client Info	<b>26327</b>	21030	21029
Oil Age	mls	Client Info	<b>600</b>	600	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	<b>6</b>	8	18
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>6</b>	2	6
Lead	ppm	ASTM D5185m >30	<b>4</b>	0	2
Copper	ppm	ASTM D5185m >35	<b>6</b>	4	4
Tin	ppm	ASTM D5185m >4	<b>2</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	<b>12</b>	6	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>53</b>	50	49
Manganese	ppm	ASTM D5185m 0	<b>2</b>	1	1
Magnesium	ppm	ASTM D5185m 560	<b>580</b>	558	534
Calcium	ppm	ASTM D5185m 1510	<b>1653</b>	1542	1480
Phosphorus	ppm	ASTM D5185m 780	<b>704</b>	642	658
Zinc	ppm	ASTM D5185m 870	<b>943</b>	953	918
Sulfur	ppm	ASTM D5185m 2040	<b>2769</b>	2508	2303

## CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	<b>10</b>	20	7
Sodium	ppm	ASTM D5185m	<b>7</b>	8	8
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	13

## INFRA-RED

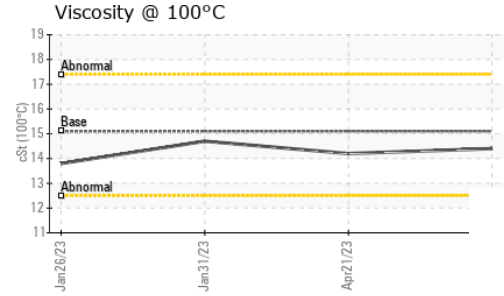
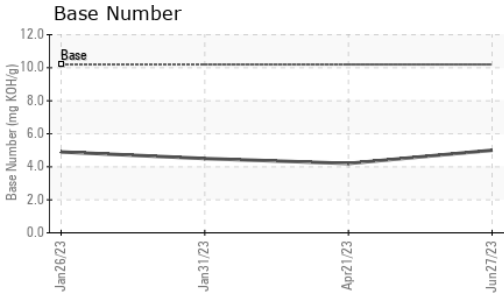
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.0</b>	10.7	11.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.0</b>	21.2	23.8

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.9</b>	18.3	19.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.0</b>	4.2	4.5



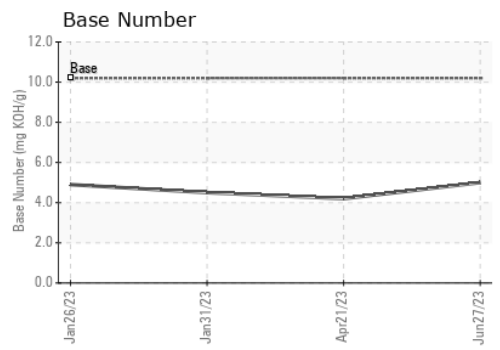
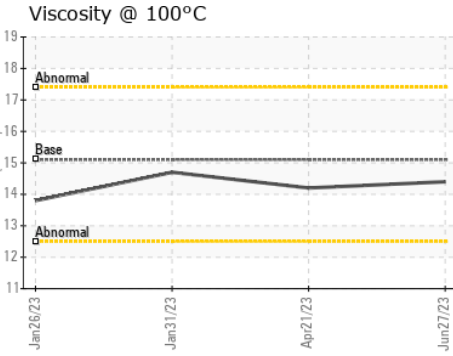
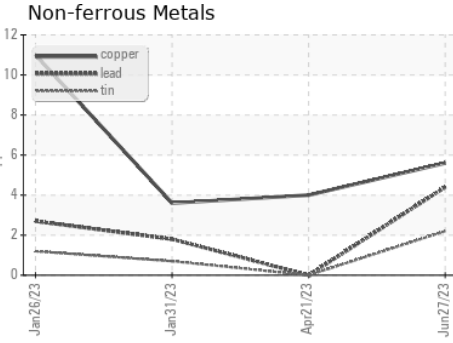
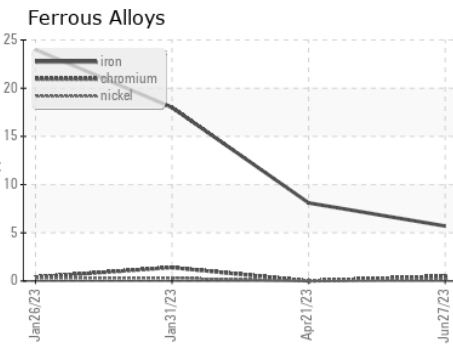
# OIL ANALYSIS REPORT



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	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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.4</b>	14.2	14.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0047434 **Received** : 28 Jun 2023  
**Lab Number** : 05885449 **Diagnosed** : 30 Jun 2023  
**Unique Number** : 10535932 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 030 - Conway Myrtle Beach**  
 3010 HWY 378  
 Conway, SC  
 US 29527  
**Contact: CHET STROSCHINE**  
 cstroschine@gflenv.com  
 T:  
 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)