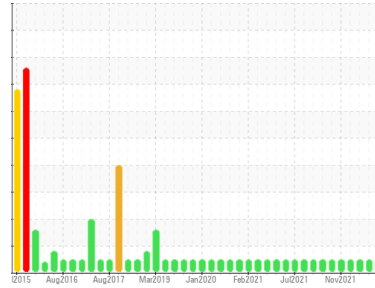




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10597C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- 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>GFL0072402</b>	GFL0048859	GFL0048905
Sample Date	Client Info		<b>27 Jun 2023</b>	24 Jan 2023	01 Jun 2022
Machine Age	hrs	Client Info	<b>25030</b>	24707	0
Oil Age	hrs	Client Info	<b>423</b>	24707	557
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>22</b>	10	13
Chromium	ppm	ASTM D5185m >4	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>&lt;1</b>	2	9
Lead	ppm	ASTM D5185m >30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</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>32</b>	11	26
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>53</b>	50	55
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>561</b>	560	633
Calcium	ppm	ASTM D5185m 1510	<b>1391</b>	1464	1536
Phosphorus	ppm	ASTM D5185m 780	<b>748</b>	691	875
Zinc	ppm	ASTM D5185m 870	<b>909</b>	916	1030
Sulfur	ppm	ASTM D5185m 2040	<b>2518</b>	2732	2911

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >+100	<b>11</b>	3	4
Sodium	ppm	ASTM D5185m	<b>3</b>	5	3
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	<1

## INFRA-RED

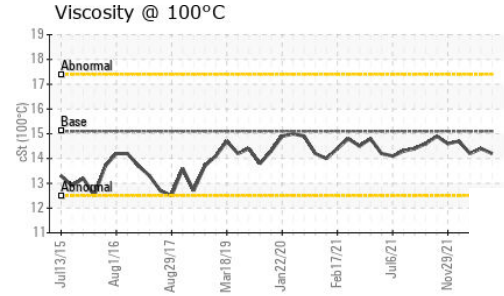
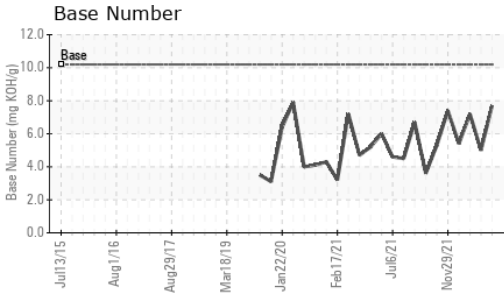
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.1</b>	10.1	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.0</b>	21.0	19.2

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.3</b>	16.4	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.7</b>	5.0	7.2



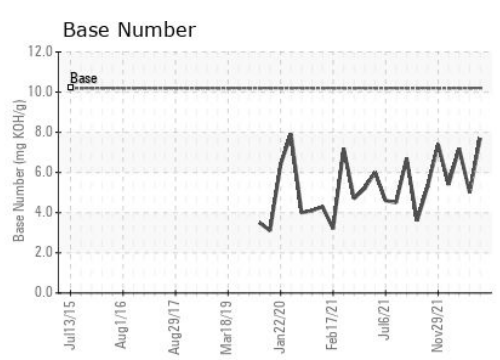
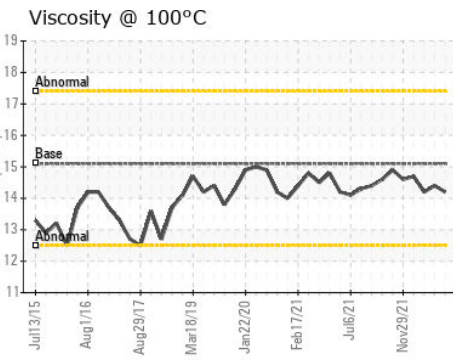
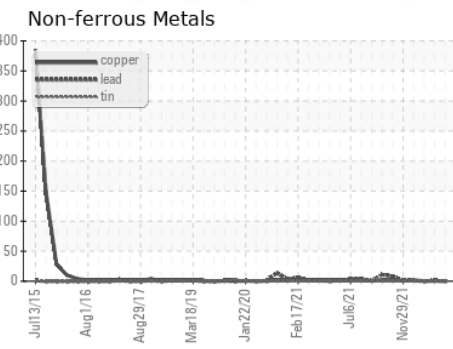
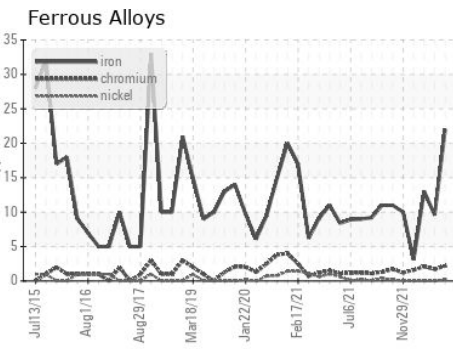
# OIL ANALYSIS REPORT



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>14.2</b>	14.4	14.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0072402 **Received** : 30 Jun 2023  
**Lab Number** : **05887741** **Diagnosed** : 02 Jul 2023  
**Unique Number** : 10538224 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 005 - Wilson/Tri-East (CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: SPENCER LIGGON  
 spencer.liggon@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)