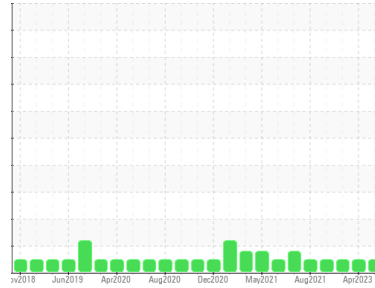




# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



Machine Id  
**1023AC**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (11 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>GFL0087211</b>	GFL0070215	GFL0047151
Sample Date	Client Info		<b>07 Jul 2023</b>	05 Apr 2023	21 Jul 2022
Machine Age	hrs	Client Info	<b>27513</b>	27550	36198
Oil Age	hrs	Client Info	<b>1200</b>	0	27463
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
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>	15	9
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	2
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	2	3
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m >35	<b>2</b>	<1	2
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 50	<b>38</b>	38	104
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m 50	<b>51</b>	47	106
Manganese	ppm	ASTM D5185m 0	<b>1</b>	1	1
Magnesium	ppm	ASTM D5185m 560	<b>502</b>	457	638
Calcium	ppm	ASTM D5185m 1510	<b>1426</b>	1299	1307
Phosphorus	ppm	ASTM D5185m 780	<b>679</b>	632	651
Zinc	ppm	ASTM D5185m 870	<b>849</b>	728	770
Sulfur	ppm	ASTM D5185m 2040	<b>2742</b>	1940	3111

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >+100	<b>10</b>	9	18
Sodium	ppm	ASTM D5185m	<b>10</b>	8	6
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	0

## INFRA-RED

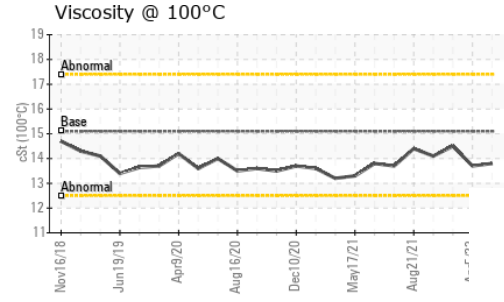
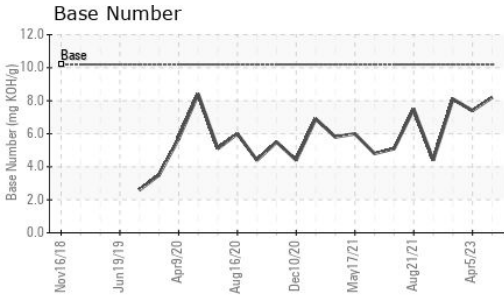
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.5</b>	6.8	5.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.7</b>	18.5	21.9

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.2</b>	14.5	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.2</b>	7.4	8.1



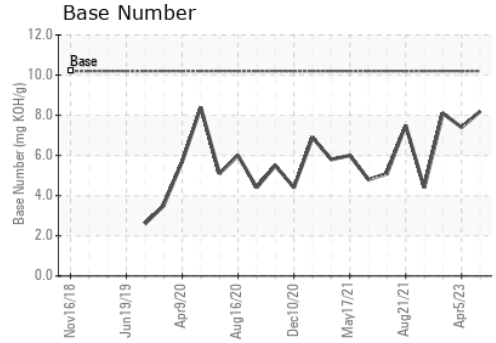
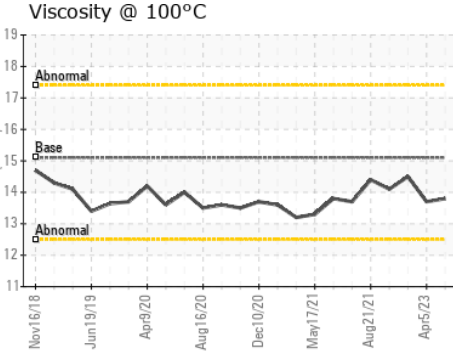
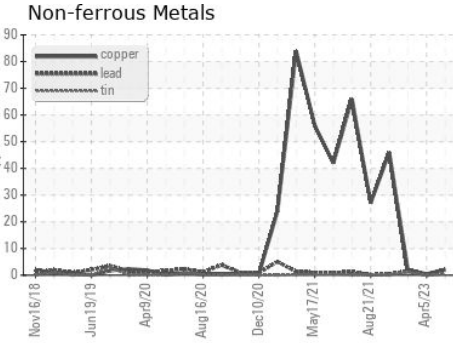
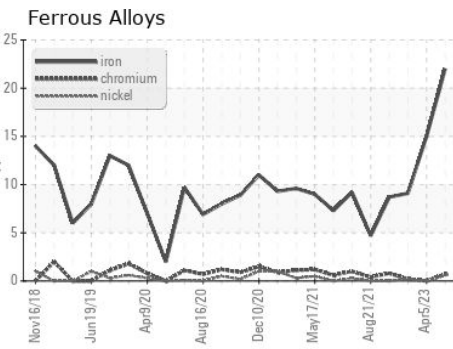
# OIL ANALYSIS REPORT



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	LIGHT	LIGHT
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>13.8</b>	13.7	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0087211 **Received** : 11 Jul 2023  
**Lab Number** : **05894831** **Diagnosed** : 11 Jul 2023  
**Unique Number** : 10550641 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Robert Hart  
 rhart@gflenv.com  
 T: (580)461-1509  
 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)