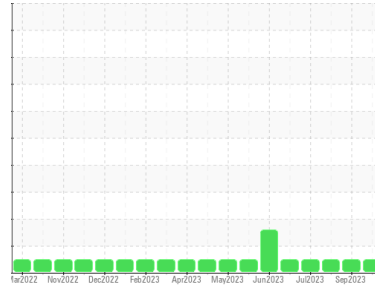




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**912066**

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	history1	history2
Sample Number	Client Info	<b>GFL0095135</b>	GFL0090674	GFL0090694
Sample Date	Client Info	<b>16 Oct 2023</b>	21 Sep 2023	30 Aug 2023
Machine Age	hrs Client Info	<b>4594</b>	4445	4298
Oil Age	hrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>50	<b>4</b>	4	5
Chromium ppm ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel ppm ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
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>2</b>	3	4
Lead ppm ASTM D5185m	>30	<b>1</b>	<1	0
Copper ppm ASTM D5185m	>35	<b>1</b>	2	<1
Tin ppm ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium ppm ASTM D5185m		<b>0</b>	0	0
Cadmium ppm ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	50	<b>7</b>	9	10
Barium ppm ASTM D5185m	5	<b>0</b>	0	0
Molybdenum ppm ASTM D5185m	50	<b>54</b>	51	60
Manganese ppm ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium ppm ASTM D5185m	560	<b>543</b>	535	621
Calcium ppm ASTM D5185m	1510	<b>1530</b>	1480	1641
Phosphorus ppm ASTM D5185m	780	<b>661</b>	697	732
Zinc ppm ASTM D5185m	870	<b>953</b>	931	974
Sulfur ppm ASTM D5185m	2040	<b>2667</b>	2375	2906

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>+100	<b>7</b>	7	7
Sodium ppm ASTM D5185m		<b>2</b>	3	4
Potassium ppm ASTM D5185m	>20	<b>2</b>	2	0

## INFRA-RED

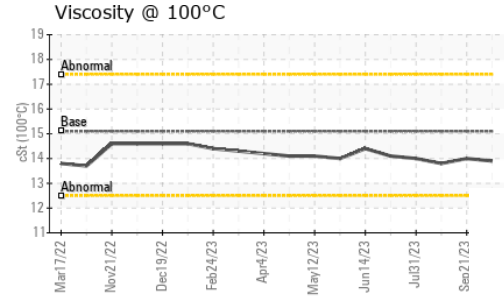
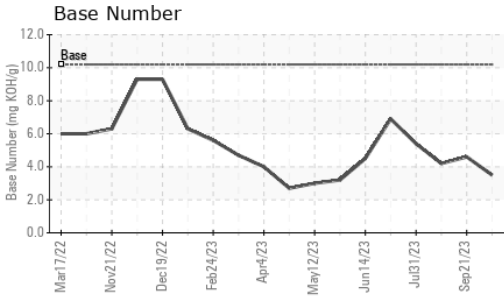
method	limit/base	current	history1	history2
Soot % *ASTM D7844		<b>0</b>	0	0
Nitration Abs/cm *ASTM D7624	>20	<b>10.3</b>	10.0	10.0
Sulfation Abs/.1mm *ASTM D7415	>30	<b>22.2</b>	20.8	20.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation Abs/.1mm *ASTM D7414	>25	<b>18.5</b>	17.4	17.5
Base Number (BN) mg KOH/g ASTM D2896	10.2	<b>3.5</b>	4.6	4.2



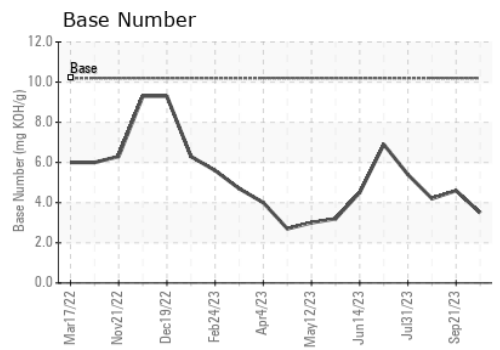
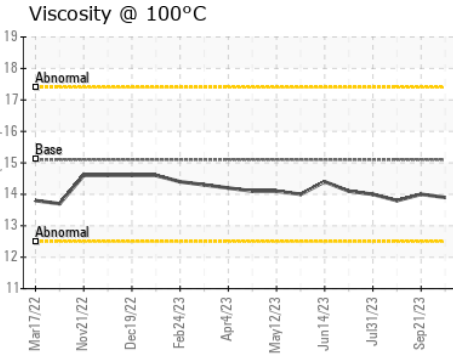
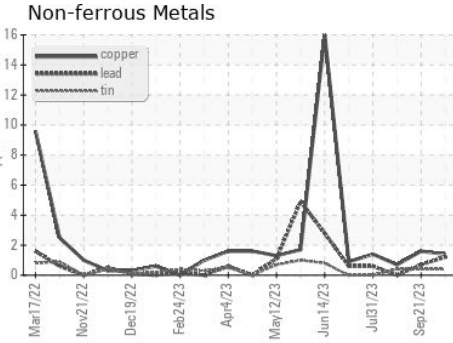
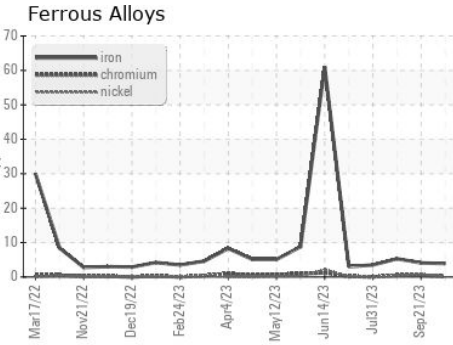
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.9</b>	14.0	13.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0095135 **Received** : 19 Oct 2023  
**Lab Number** : **05984106** **Diagnosed** : 20 Oct 2023  
**Unique Number** : 10701401 **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:

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)