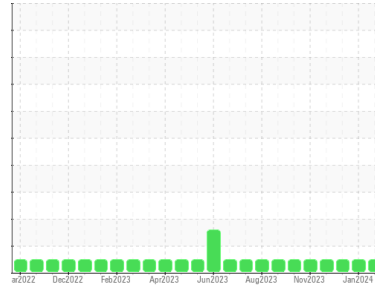




# OIL ANALYSIS REPORT

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>GFL0103314</b>	GFL0103355	GFL0099909
Sample Date	Client Info		<b>23 Jan 2024</b>	02 Jan 2024	05 Dec 2023
Machine Age	hrs	Client Info	<b>5236</b>	5089	4914
Oil Age	hrs	Client Info	<b>0</b>	0	1200
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>10</b>	2	<1
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	2	2
Lead	ppm	ASTM D5185m >30	<b>3</b>	1	0
Copper	ppm	ASTM D5185m >35	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>17</b>	24	37
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>46</b>	49	45
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>598</b>	550	529
Calcium	ppm	ASTM D5185m 1510	<b>1737</b>	1633	1554
Phosphorus	ppm	ASTM D5185m 780	<b>892</b>	822	790
Zinc	ppm	ASTM D5185m 870	<b>927</b>	975	967
Sulfur	ppm	ASTM D5185m 2040	<b>2470</b>	2622	2633

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>6</b>	5	5
Sodium	ppm	ASTM D5185m	<b>4</b>	5	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1

## INFRA-RED

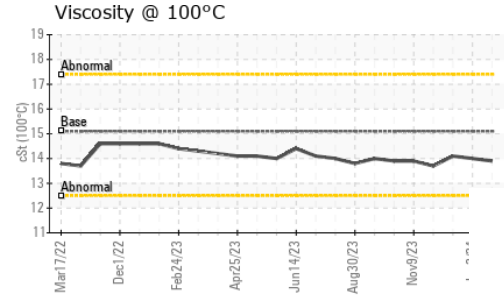
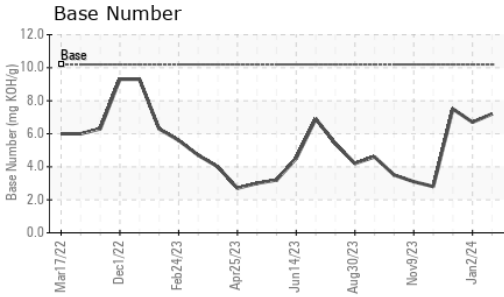
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.0</b>	8.9	7.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.0</b>	19.3	19.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.9</b>	16.0	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.2</b>	6.7	7.5



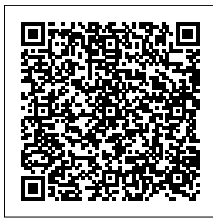
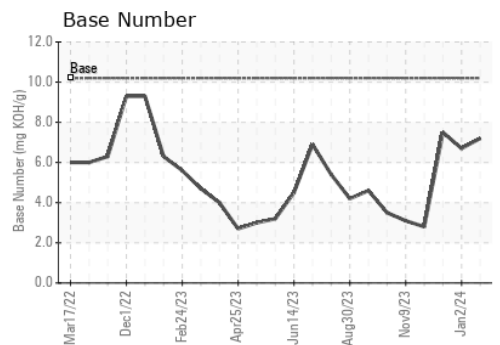
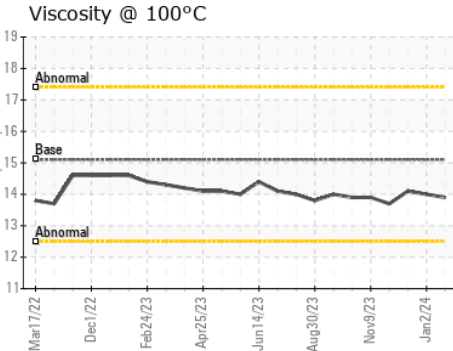
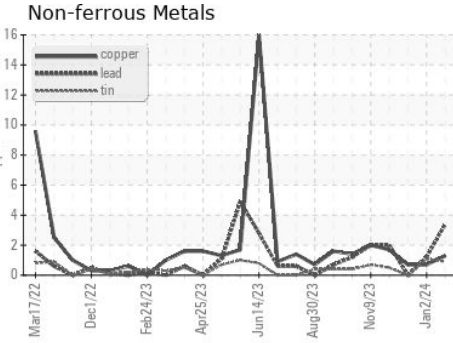
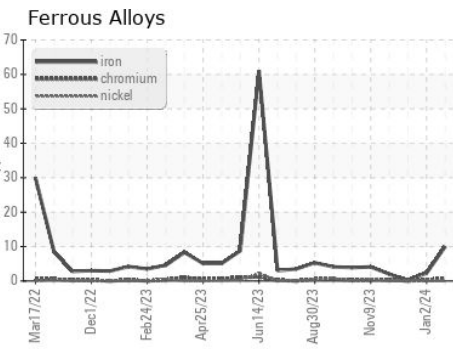
# OIL ANALYSIS REPORT



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	LIGHT	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	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103314 **Received** : 25 Jan 2024  
**Lab Number** : **06070348** **Diagnosed** : 30 Jan 2024  
**Unique Number** : 10847025 **Diagnostician** : Sean Felton  
**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)