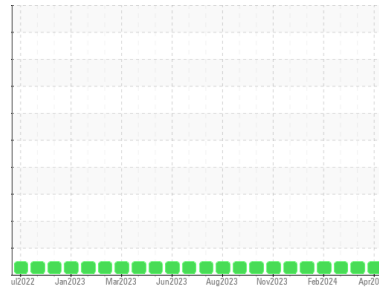




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**731125**

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>GFL0114067</b>	GFL0114071	GFL0109802
Sample Date	Client Info		<b>18 Apr 2024</b>	25 Mar 2024	29 Feb 2024
Machine Age	hrs	Client Info	<b>7216</b>	7085	6950
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

## 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>11</b>	9	6
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>1</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m >35	<b>3</b>	1	0
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>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>13</b>	20	30
Barium	ppm	ASTM D5185m 5	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>55</b>	54	52
Manganese	ppm	ASTM D5185m 0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>598</b>	559	636
Calcium	ppm	ASTM D5185m 1510	<b>1770</b>	1650	1789
Phosphorus	ppm	ASTM D5185m 780	<b>814</b>	821	926
Zinc	ppm	ASTM D5185m 870	<b>1045</b>	1017	1084
Sulfur	ppm	ASTM D5185m 2040	<b>3009</b>	2695	2956

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	6	4
Sodium	ppm	ASTM D5185m	<b>8</b>	6	5
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	0

## INFRA-RED

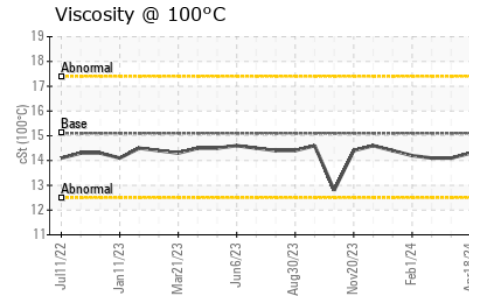
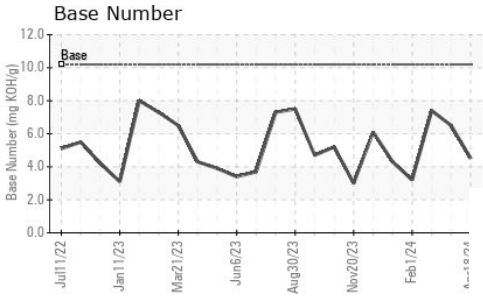
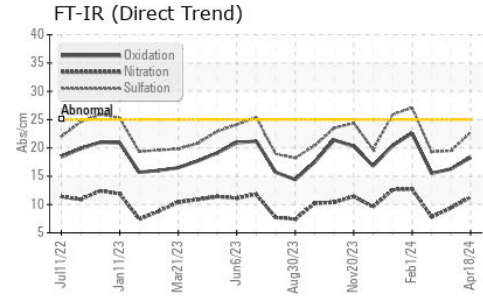
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.3</b>	9.4	7.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.7</b>	19.5	19.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.3</b>	16.3	15.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.5</b>	6.5	7.4



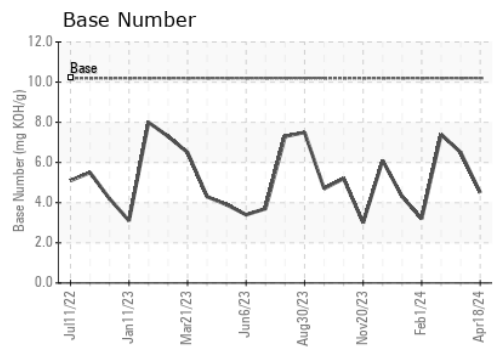
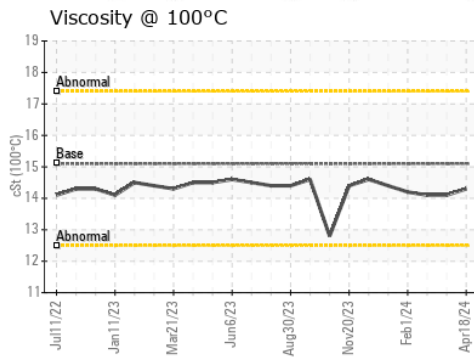
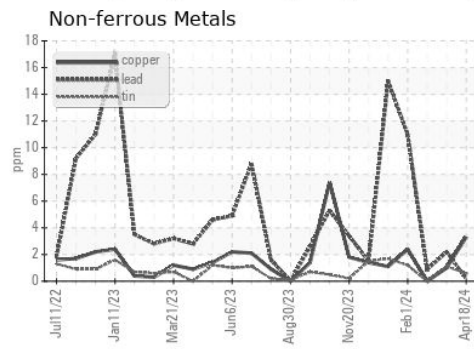
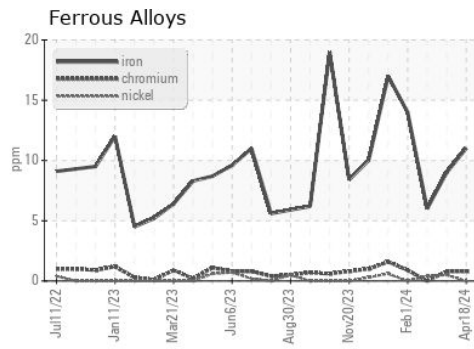
# OIL ANALYSIS REPORT



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	14.3	14.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114067  
**Lab Number** : 06155758  
**Unique Number** : 10991181  
**Test Package** : FLEET  
**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@gflenv.com

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)