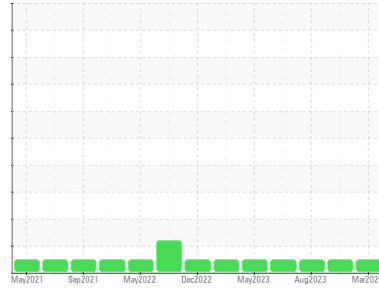




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**729063**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

## 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>GFL0106994</b>	GFL0094245	GFL0085369
Sample Date	Client Info		<b>01 Mar 2024</b>	25 Nov 2023	17 Aug 2023
Machine Age	hrs	Client Info	<b>20699</b>	20173	19406
Oil Age	hrs	Client Info	<b>0</b>	0	19406
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>18</b>	2	8
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	0
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>2</b>	23	12
Barium	ppm	ASTM D5185m 5	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>57</b>	46	77
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>880</b>	550	991
Calcium	ppm	ASTM D5185m 1510	<b>1016</b>	1411	1587
Phosphorus	ppm	ASTM D5185m 780	<b>998</b>	752	1234
Zinc	ppm	ASTM D5185m 870	<b>1194</b>	913	1491
Sulfur	ppm	ASTM D5185m 2040	<b>2671</b>	2324	4128

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	2	5
Sodium	ppm	ASTM D5185m	<b>17</b>	5	8
Potassium	ppm	ASTM D5185m >20	<b>6</b>	2	2

## INFRA-RED

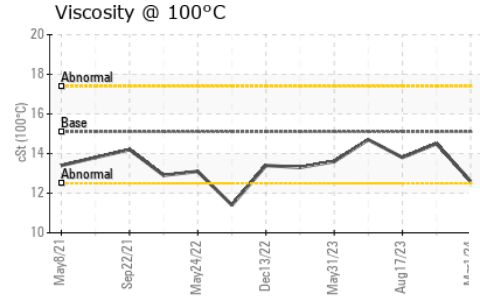
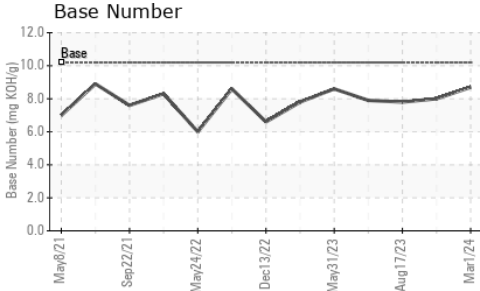
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.5</b>	0	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.1</b>	8.4	8.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.9</b>	18.8	19.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.5</b>	16.2	16.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.7</b>	8.0	7.8



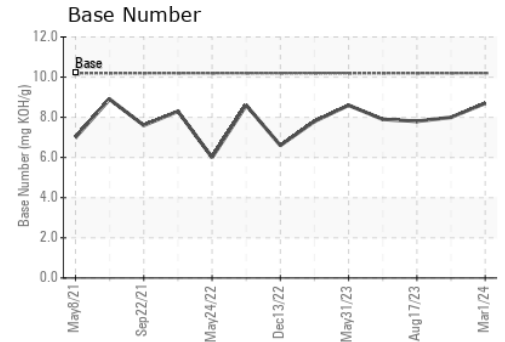
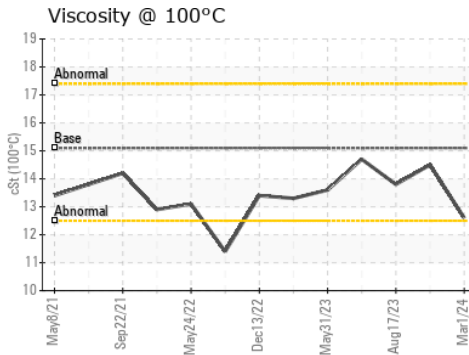
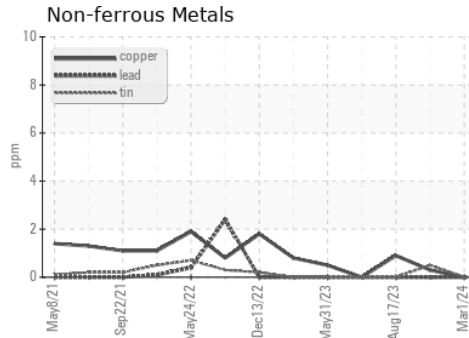
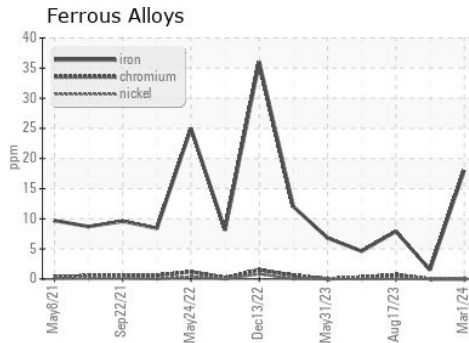
# OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	12.6	14.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106994  
**Lab Number** : 06109131  
**Unique Number** : 10912628  
**Test Package** : FLEET

**Received** : 05 Mar 2024  
**Tested** : 06 Mar 2024  
**Diagnosed** : 07 Mar 2024 - Sean Felton

**GFL Environmental - 882 - Gainesville**  
 5002 SW 41st Blvd  
 Gainesville, FL  
 US 32608  
 Contact: ROBERT CLARK  
 robert.clark@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)

T:  
F: