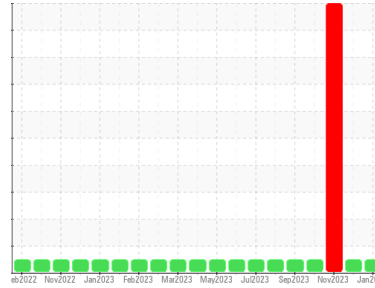




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**731120**

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>GFL0103353</b>	GFL0099945	GFL0095178
Sample Date	Client Info	<b>02 Jan 2024</b>	29 Nov 2023	06 Nov 2023
Machine Age	hrs	<b>6596</b>	6430	8043
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	SEVERE

## 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>3</b>	13	165
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	9
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	4
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>2</b>	2	11
Lead	ppm ASTM D5185m >30	<b>&lt;1</b>	3	13
Copper	ppm ASTM D5185m >35	<b>&lt;1</b>	1	2
Tin	ppm ASTM D5185m >4	<b>1</b>	<1	2
Vanadium	ppm ASTM D5185m	<b>&lt;1</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>25</b>	8	9
Barium	ppm ASTM D5185m 5	<b>0</b>	2	0
Molybdenum	ppm ASTM D5185m 50	<b>49</b>	59	67
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	0	3
Magnesium	ppm ASTM D5185m 560	<b>545</b>	847	632
Calcium	ppm ASTM D5185m 1510	<b>1631</b>	1123	1798
Phosphorus	ppm ASTM D5185m 780	<b>827</b>	945	803
Zinc	ppm ASTM D5185m 870	<b>965</b>	1170	1063
Sulfur	ppm ASTM D5185m 2040	<b>2577</b>	4222	2418

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>6</b>	8	44
Sodium	ppm ASTM D5185m	<b>6</b>	2	12
Potassium	ppm ASTM D5185m >20	<b>0</b>	4	3

## INFRA-RED

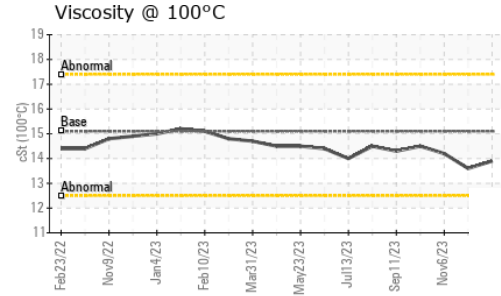
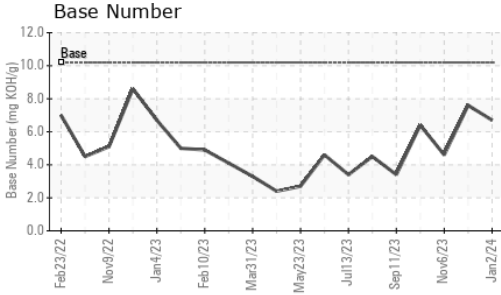
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.4	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>8.8</b>	9.4	13.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.2</b>	21.4	25.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.0</b>	18.3	22.3
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>6.7</b>	7.6	4.6



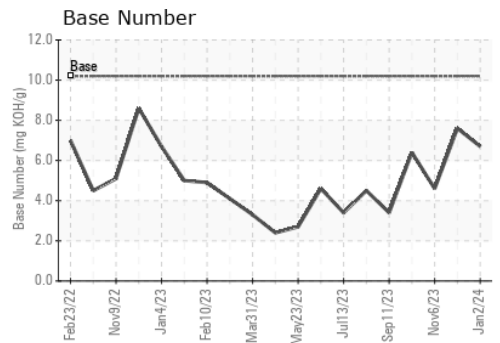
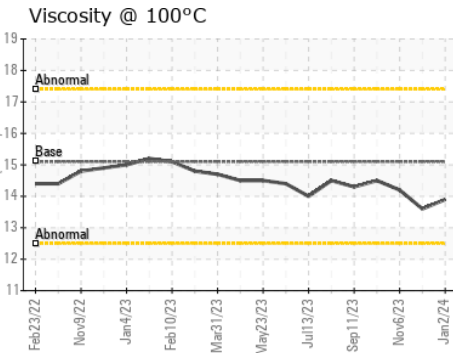
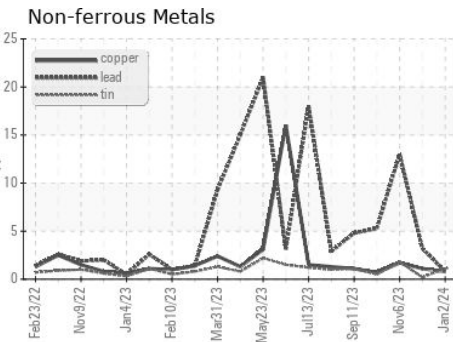
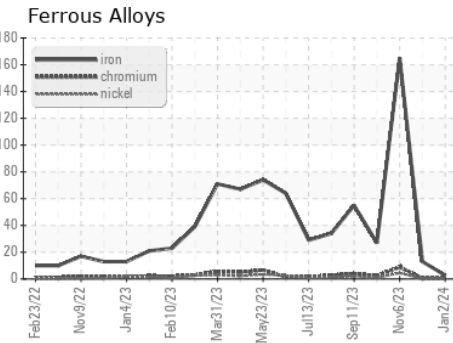
# OIL ANALYSIS REPORT



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	13.9	13.6

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0103353  
 Lab Number : 06050618  
 Unique Number : 10816567  
 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)