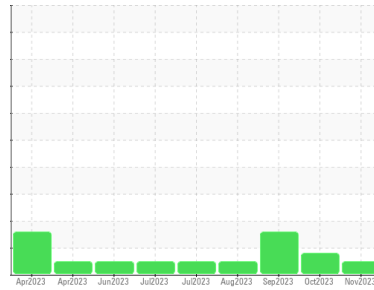




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**732027**  
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>GFL0095183</b>	GFL0095149	GFL0090667
Sample Date	Client Info		<b>07 Nov 2023</b>	04 Oct 2023	20 Sep 2023
Machine Age	hrs	Client Info	<b>1444</b>	1243	1154
Oil Age	hrs	Client Info	<b>0</b>	1200	1154
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>10</b>	▲ 73	28
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	1
Titanium	ppm	ASTM D5185m >5	<b>&lt;1</b>	2	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	12	4
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	3	3
Copper	ppm	ASTM D5185m >150	<b>2</b>	12	13
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	2
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>36</b>	10	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>51</b>	62	54
Manganese	ppm	ASTM D5185m 0	<b>1</b>	6	4
Magnesium	ppm	ASTM D5185m 560	<b>591</b>	763	771
Calcium	ppm	ASTM D5185m 1510	<b>1524</b>	1639	1194
Phosphorus	ppm	ASTM D5185m 780	<b>830</b>	799	664
Zinc	ppm	ASTM D5185m 870	<b>1024</b>	1107	926
Sulfur	ppm	ASTM D5185m 2040	<b>2581</b>	2592	2425

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	22	▲ 90
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	6	5
Potassium	ppm	ASTM D5185m >20	<b>3</b>	19	7

## INFRA-RED

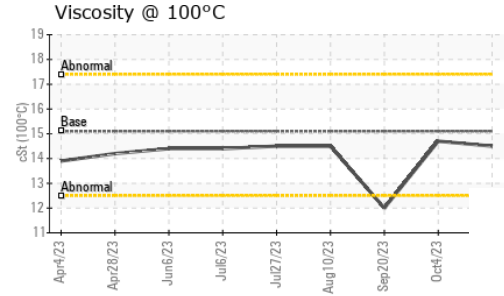
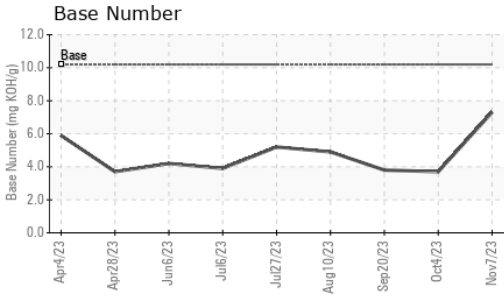
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.5</b>	12.1	11.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.7</b>	26.2	23.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.7</b>	22.2	20.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.3</b>	3.7	3.8



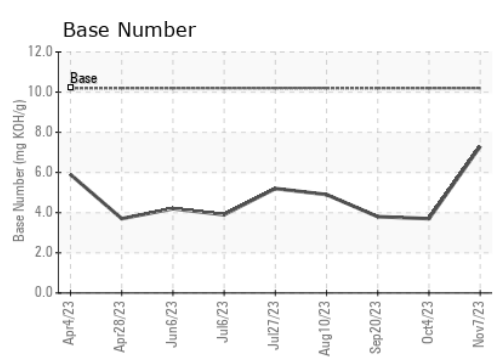
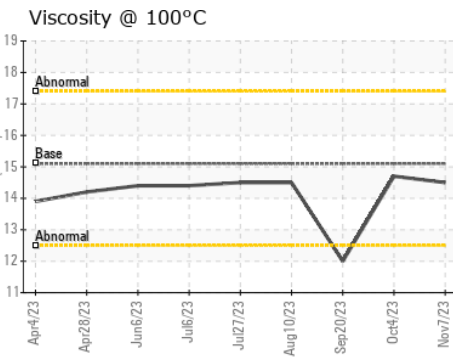
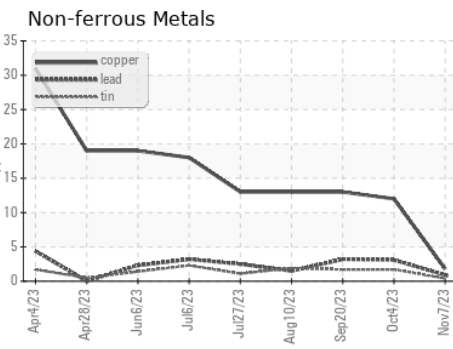
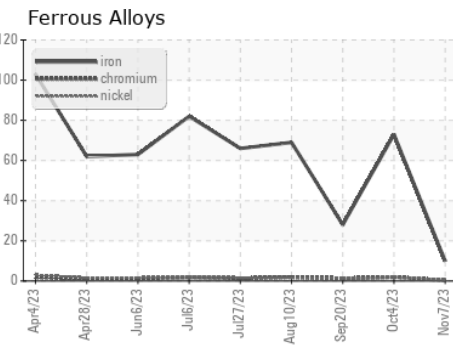
# OIL ANALYSIS REPORT



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	>0.1	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>14.5</b>	14.7	12.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0095183 **Received** : 10 Nov 2023  
**Lab Number** : **06004837** **Diagnosed** : 13 Nov 2023  
**Unique Number** : 10738599 **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)