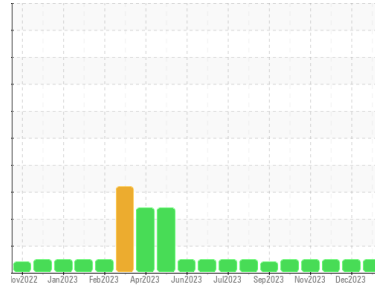




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**933022**

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>GFL0103306</b>	GFL0099920	GFL0099940
Sample Date	Client Info	<b>12 Jan 2024</b>	15 Dec 2023	18 Nov 2023
Machine Age	hrs	<b>3129</b>	2964	2790
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Not Chngd
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>6</b>	8	18
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	2
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	<1
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	3
Lead	ppm ASTM D5185m >30	<b>1</b>	1	12
Copper	ppm ASTM D5185m >35	<b>4</b>	7	3
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	0	1
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>7</b>	28	9
Barium	ppm ASTM D5185m 5	<b>3</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>57</b>	51	63
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	1
Magnesium	ppm ASTM D5185m 560	<b>597</b>	558	695
Calcium	ppm ASTM D5185m 1510	<b>1453</b>	1369	1838
Phosphorus	ppm ASTM D5185m 780	<b>712</b>	696	868
Zinc	ppm ASTM D5185m 870	<b>1012</b>	907	1122
Sulfur	ppm ASTM D5185m 2040	<b>2428</b>	2301	2596

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>10</b>	16	6
Sodium	ppm ASTM D5185m	<b>0</b>	0	9
Potassium	ppm ASTM D5185m >20	<b>2</b>	2	<1

## INFRA-RED

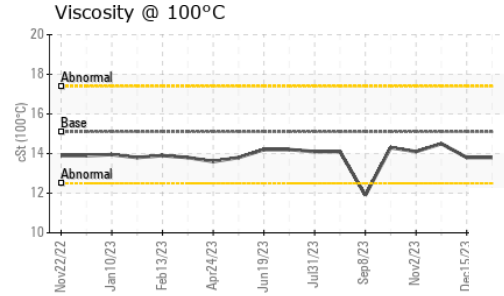
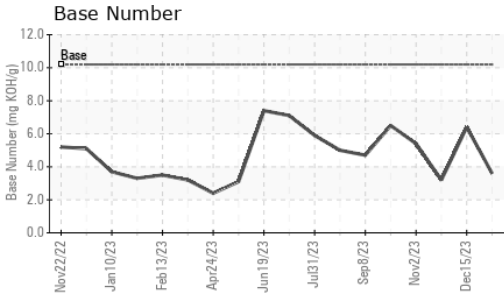
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm *ASTM D7624 >20	<b>11.0</b>	9.4	12.6
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>23.7</b>	20.4	28.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.2</b>	17.3	22.8
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>3.6</b>	6.4	3.2



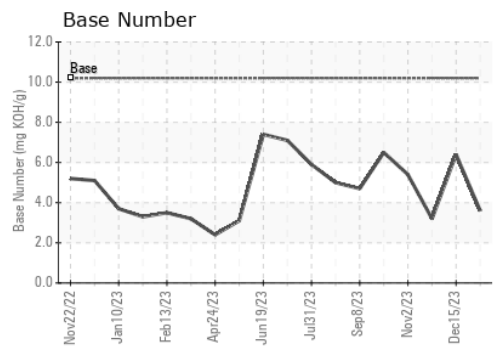
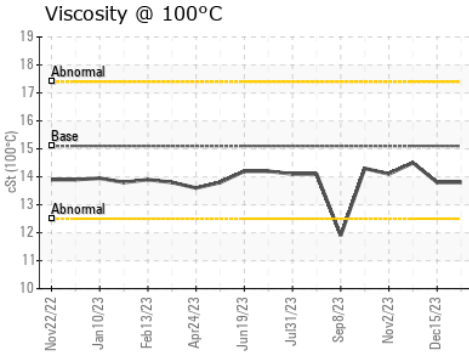
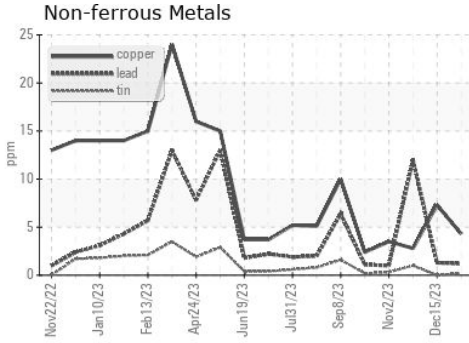
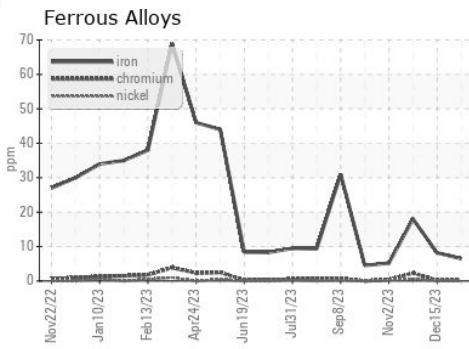
# OIL ANALYSIS REPORT



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>13.8</b>	13.8	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103306 **Received** : 18 Jan 2024  
**Lab Number** : **06064137** **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835519 **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:

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)