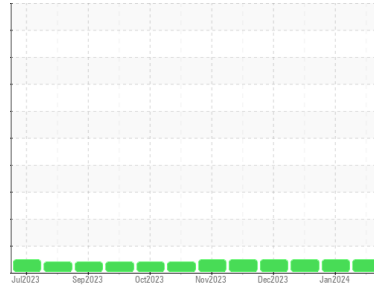




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**433003**

Component  
**Natural Gas 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>GFL0109856</b>	GFL0103315	GFL0099928
Sample Date	Client Info	<b>05 Feb 2024</b>	22 Jan 2024	02 Jan 2024
Machine Age	hrs	<b>2350</b>	2178	1946
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>9</b>	9	14
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>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>4</b>	5	2
Lead	ppm	ASTM D5185m >30	<b>3</b>	2	6
Copper	ppm	ASTM D5185m >35	<b>9</b>	9	1
Tin	ppm	ASTM D5185m >4	<b>2</b>	2	1
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>17</b>	6	12
Barium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>50</b>	44	59
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>570</b>	531	624
Calcium	ppm	ASTM D5185m 1510	<b>1378</b>	1481	1748
Phosphorus	ppm	ASTM D5185m 780	<b>677</b>	620	801
Zinc	ppm	ASTM D5185m 870	<b>872</b>	835	1059
Sulfur	ppm	ASTM D5185m 2040	<b>2165</b>	1998	2440

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>20</b>	15	5
Sodium	ppm	ASTM D5185m	<b>12</b>	4	9
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1

## INFRA-RED

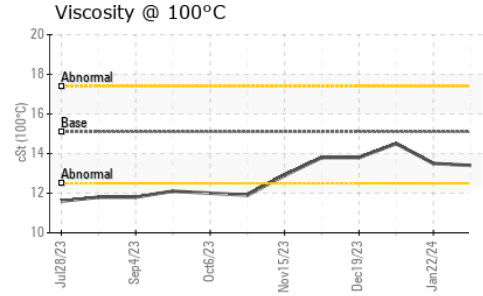
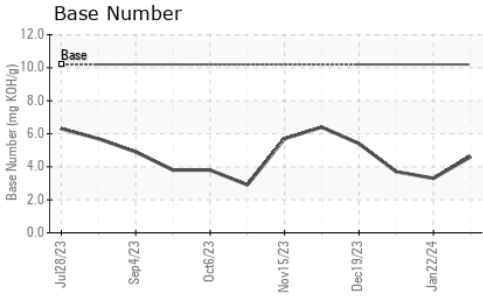
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	11.5	12.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.2</b>	24.4	26.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.2</b>	20.4	21.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.6</b>	3.3	3.7



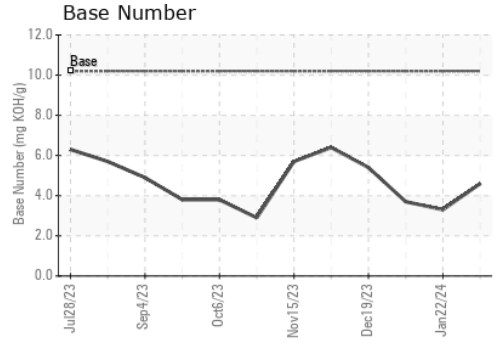
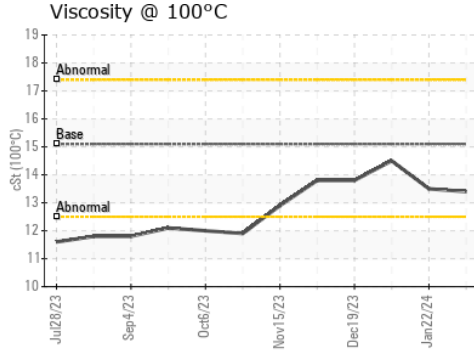
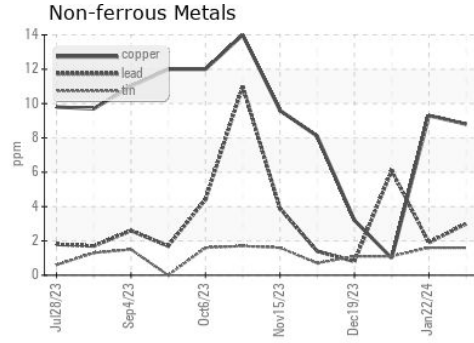
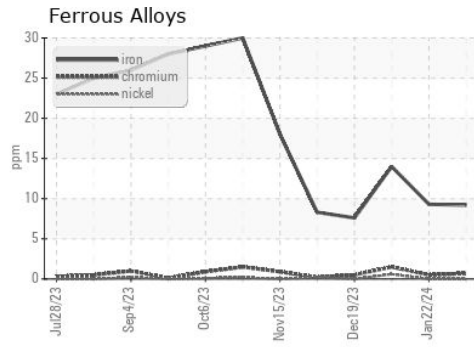
# OIL ANALYSIS REPORT



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>13.4</b>	13.5	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109856 **Received** : 08 Feb 2024  
**Lab Number** : **06083288** **Tested** : 08 Feb 2024  
**Unique Number** : 10870733 **Diagnosed** : 08 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**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)

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F: