



# OIL ANALYSIS REPORT

Sample Rating Trend

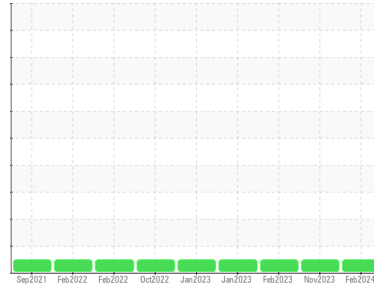
**NORMAL**



Machine Id  
**945012**

Component  
**Natural Gas Engine**

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



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0092171</b>	GFL0084658	GFL0068548
Sample Date	Client Info	<b>01 Feb 2024</b>	06 Nov 2023	08 Feb 2023
Machine Age	hrs	<b>56406</b>	0	18107
Oil Age	hrs	<b>35391</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed
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>8</b>	13	15
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m >2	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	0	1
Lead	ppm	ASTM D5185m >30	<b>1</b>	0	1
Copper	ppm	ASTM D5185m >35	<b>2</b>	0	3
Tin	ppm	ASTM D5185m >4	<b>1</b>	0	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>6</b>	26	8
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>51</b>	52	57
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	2
Magnesium	ppm	ASTM D5185m 560	<b>519</b>	692	569
Calcium	ppm	ASTM D5185m 1510	<b>1481</b>	1663	1705
Phosphorus	ppm	ASTM D5185m 780	<b>650</b>	888	712
Zinc	ppm	ASTM D5185m 870	<b>906</b>	1092	993
Sulfur	ppm	ASTM D5185m 2040	<b>2315</b>	2702	2517

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>7</b>	14	6
Sodium	ppm	ASTM D5185m	<b>7</b>	6	7
Potassium	ppm	ASTM D5185m >20	<b>3</b>	0	2

## INFRA-RED

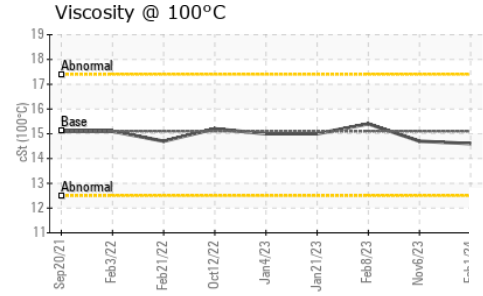
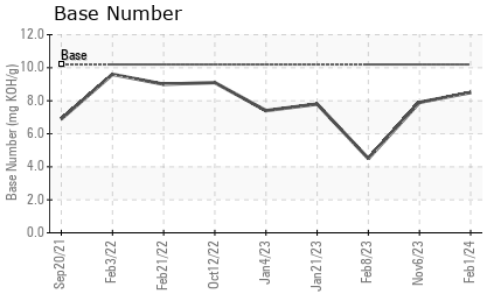
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>1.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.9</b>	8.0	12.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.5</b>	19.3	24.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.3</b>	16.3	20.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.5</b>	7.9	4.5



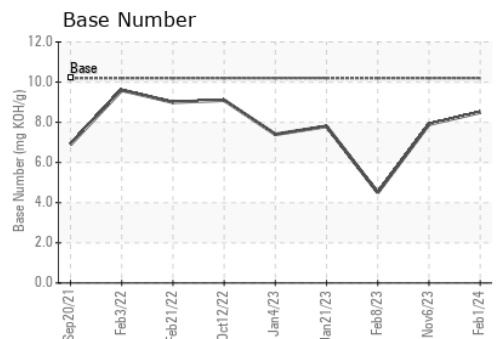
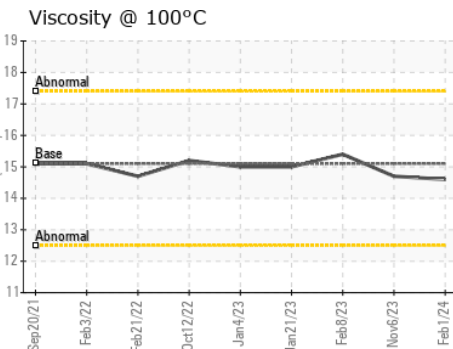
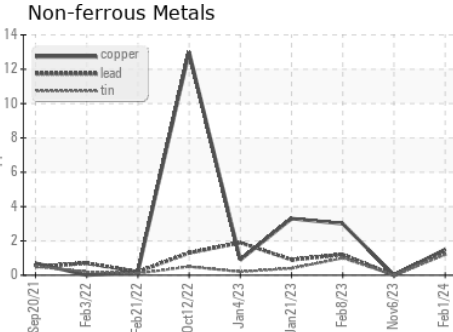
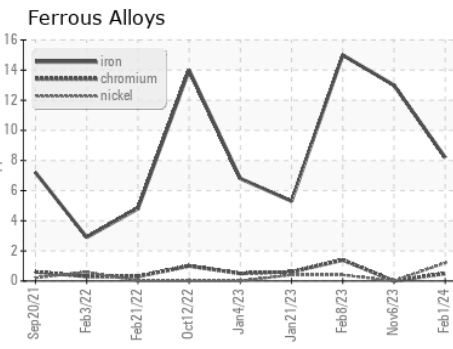
# OIL ANALYSIS REPORT



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>14.6</b>	14.7	15.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092171      **Received** : 06 Feb 2024  
**Lab Number** : 06081888      **Tested** : 07 Feb 2024  
**Unique Number** : 10869333      **Diagnosed** : 07 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Jose Gonzalez  
 jgonzalez2@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)