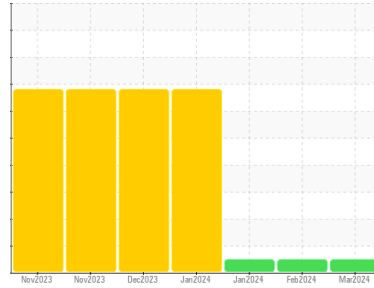




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**934025**

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>GFL0108037</b>	GFL0108030	GFL0108137
Sample Date	Client Info	<b>07 Mar 2024</b>	15 Feb 2024	25 Jan 2024
Machine Age	hrs Client Info	<b>1994</b>	1853	1712
Oil Age	hrs Client Info	<b>1994</b>	1712	0
Oil Changed	Client Info	<b>Not Changed</b>	Not 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>34</b>	30	27
Chromium	ppm ASTM D5185m >4	<b>1</b>	<1	1
Nickel	ppm ASTM D5185m >2	<b>1</b>	<1	2
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>5</b>	4	3
Lead	ppm ASTM D5185m >30	<b>2</b>	1	2
Copper	ppm ASTM D5185m >35	<b>6</b>	5	5
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>12</b>	22	39
Barium	ppm ASTM D5185m 5	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>58</b>	55	55
Manganese	ppm ASTM D5185m 0	<b>4</b>	3	4
Magnesium	ppm ASTM D5185m 560	<b>676</b>	725	620
Calcium	ppm ASTM D5185m 1510	<b>1729</b>	1799	1373
Phosphorus	ppm ASTM D5185m 780	<b>828</b>	934	698
Zinc	ppm ASTM D5185m 870	<b>1040</b>	1116	960
Sulfur	ppm ASTM D5185m 2040	<b>2948</b>	2842	2196

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>8</b>	8	10
Sodium	ppm ASTM D5185m	<b>8</b>	6	2
Potassium	ppm ASTM D5185m >20	<b>3</b>	2	3

## INFRA-RED

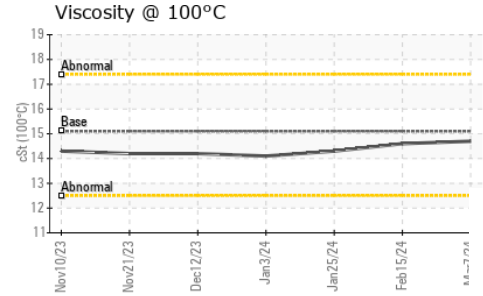
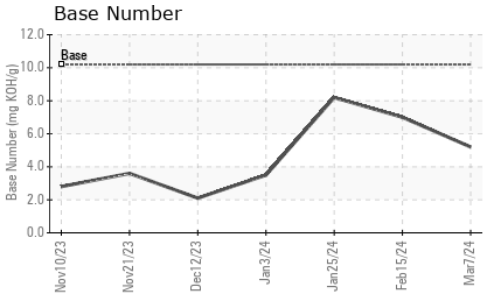
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm *ASTM D7624 >20	<b>12.7</b>	10.6	8.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.1</b>	20.4	20.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.7</b>	18.6	17.6
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>5.2</b>	7.0	8.2



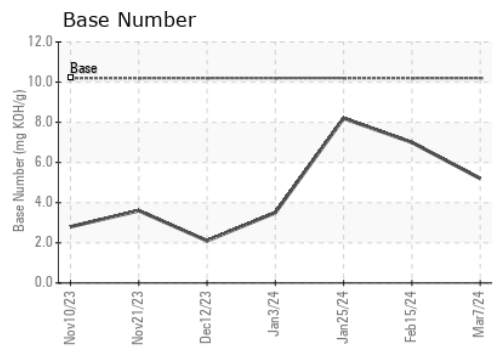
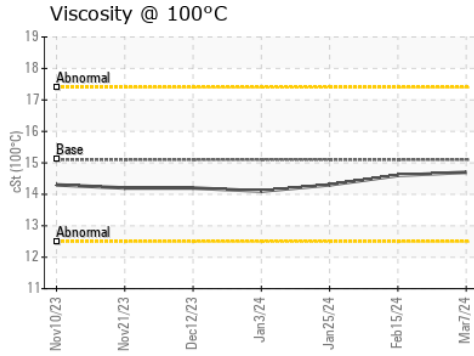
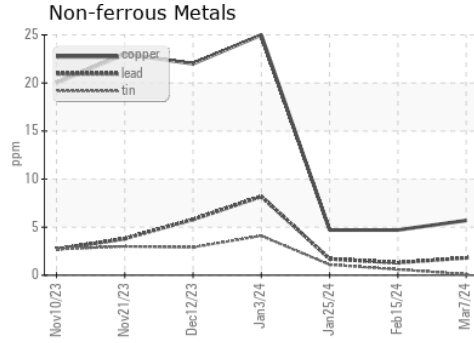
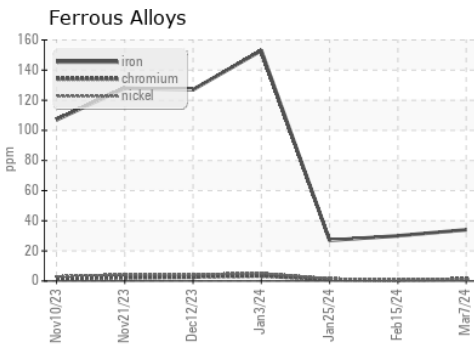
# OIL ANALYSIS REPORT



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>14.7</b>	14.6	14.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108037  
**Lab Number** : **06114967**  
**Unique Number** : 10923800  
**Test Package** : FLEET  
**Received** : 11 Mar 2024  
**Tested** : 12 Mar 2024  
**Diagnosed** : 12 Mar 2024 - Wes Davis

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: JOHNNY PEREZ  
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 T:  
 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)