

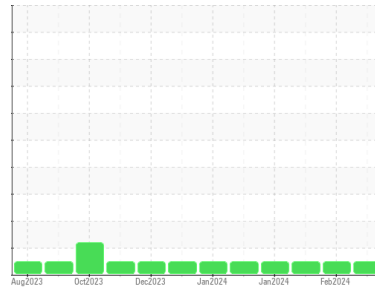


# OIL ANALYSIS REPORT



Machine Id  
**834048**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

### Sample Rating Trend



**NORMAL**



## 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>GFL0114142</b>	GFL0108069	GFL0108114
Sample Date	Client Info		<b>08 Mar 2024</b>	20 Feb 2024	30 Jan 2024
Machine Age	hrs	Client Info	<b>1520</b>	1388	1241
Oil Age	hrs	Client Info	<b>299</b>	167	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
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >80	<b>8</b>	0	6
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;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 >30	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m >150	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>18</b>	34	46
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	13
Molybdenum	ppm	ASTM D5185m 50	<b>48</b>	49	51
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 560	<b>545</b>	586	554
Calcium	ppm	ASTM D5185m 1510	<b>1615</b>	1654	1455
Phosphorus	ppm	ASTM D5185m 780	<b>774</b>	809	715
Zinc	ppm	ASTM D5185m 870	<b>909</b>	967	928
Sulfur	ppm	ASTM D5185m 2040	<b>2690</b>	2352	2435

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>5</b>	5	6
Sodium	ppm	ASTM D5185m	<b>7</b>	6	0
Potassium	ppm	ASTM D5185m >20	<b>17</b>	2	2

## INFRA-RED

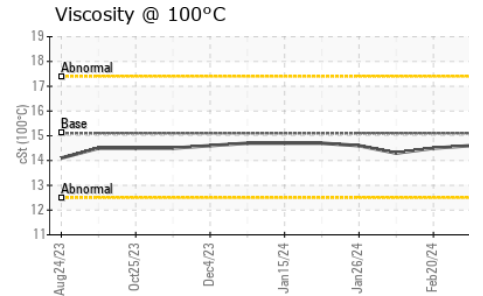
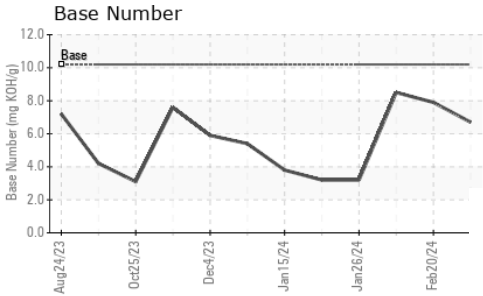
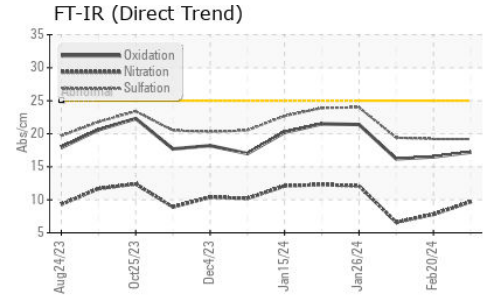
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.7</b>	7.8	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.2</b>	19.2	19.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.2</b>	16.5	16.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>6.7</b>	7.9	8.5



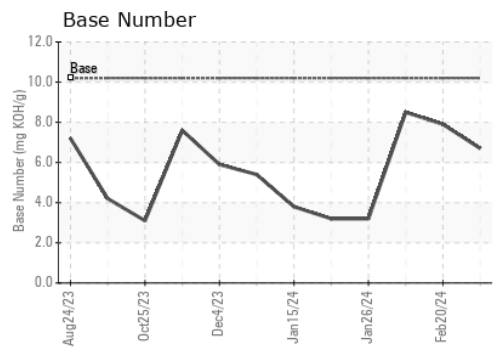
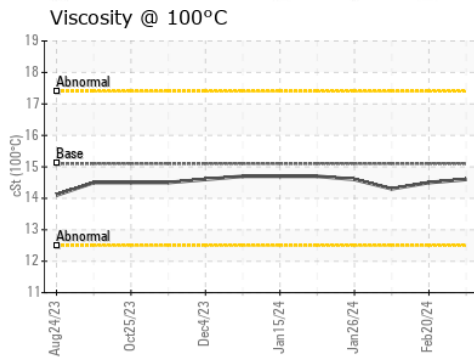
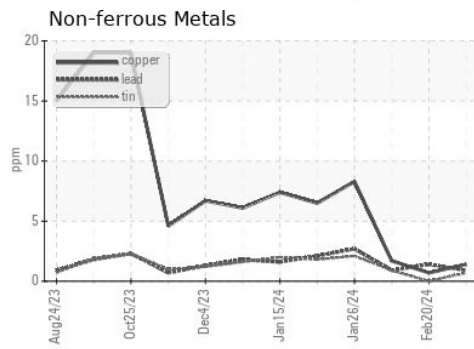
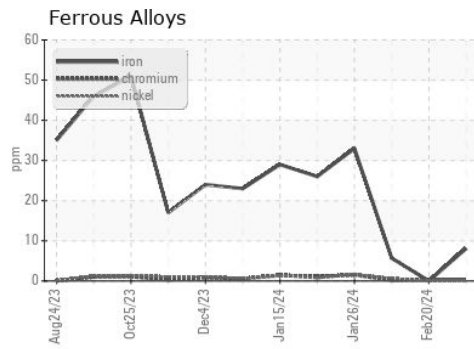
# OIL ANALYSIS REPORT



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	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114142      **Received** : 16 Apr 2024  
**Lab Number** : 06150927      **Tested** : 17 Apr 2024  
**Unique Number** : 10981005      **Diagnosed** : 17 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: SARA PATRICK  
 spatrack@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)