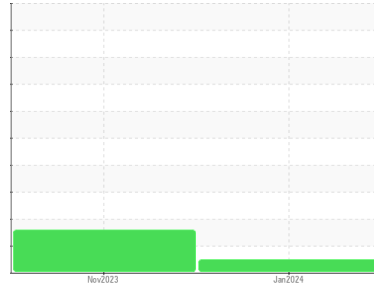




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**414054**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (60 QTS)**

## 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>GFL0092688</b>	GFL0092672	---
Sample Date	Client Info		<b>17 Jan 2024</b>	28 Nov 2023	---
Machine Age	hrs	Client Info	<b>730</b>	730	---
Oil Age	hrs	Client Info	<b>725</b>	730	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	0.4	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>11</b>	34	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	1	---
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	10	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>44</b>	153	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	3	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>15</b>	113	---
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 50	<b>68</b>	105	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	4	---
Magnesium	ppm	ASTM D5185m 560	<b>916</b>	721	---
Calcium	ppm	ASTM D5185m 1510	<b>1175</b>	1305	---
Phosphorus	ppm	ASTM D5185m 780	<b>1062</b>	709	---
Zinc	ppm	ASTM D5185m 870	<b>1202</b>	856	---
Sulfur	ppm	ASTM D5185m 2040	<b>2969</b>	2171	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	▲ 47	---
Sodium	ppm	ASTM D5185m	<b>1</b>	4	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	25	---

## INFRA-RED

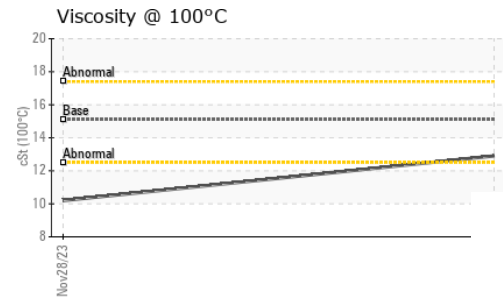
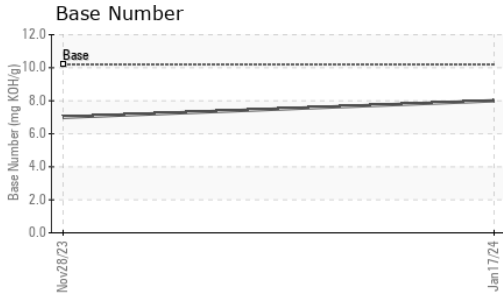
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.2</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.1</b>	10.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.2</b>	24.2	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.7</b>	22.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.0</b>	7.0	---



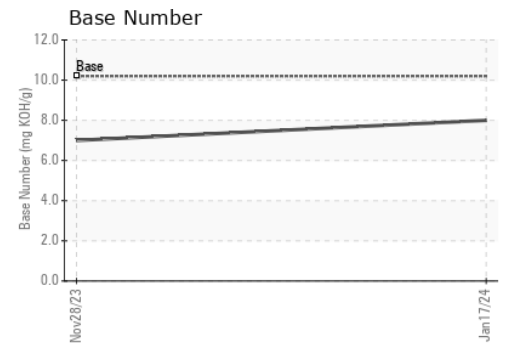
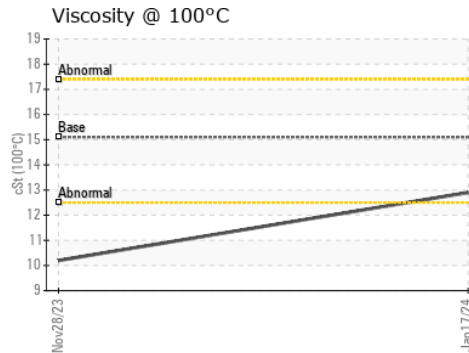
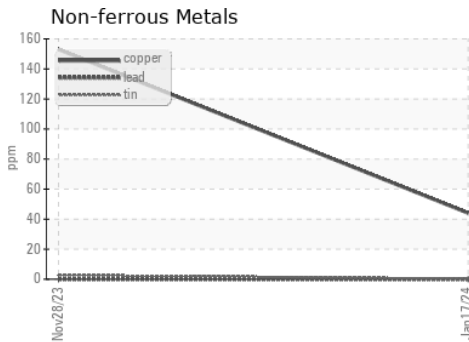
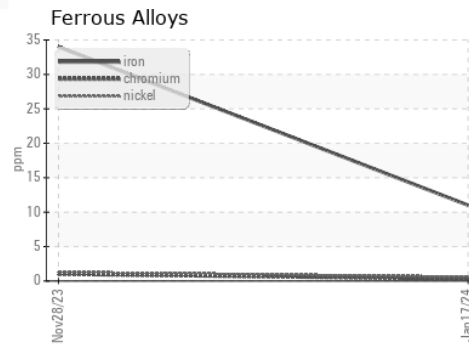
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	12.9	10.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092688 **Received** : 29 Jan 2024  
**Lab Number** : 06072472 **Diagnosed** : 30 Jan 2024  
**Unique Number** : 10849149 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 005 - Wilson/Tri-East(CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: WALTER SKOKOWSKI  
 walter.skokowski@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)

T:  
F: