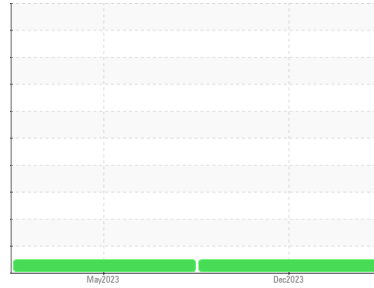




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**523108- SW7306 FREIGHTLINER CASCADIA 125**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0066582</b>	GFL0066571	---
Sample Date	Client Info	<b>29 Dec 2023</b>	24 May 2023	---
Machine Age	mls Client Info	<b>0</b>	180690	---
Oil Age	mls Client Info	<b>0</b>	0	---
Oil Changed	Client Info	<b>N/A</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	---
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 >80	<b>16</b>	8	---
Chromium	ppm ASTM D5185m >5	<b>2</b>	<1	---
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm ASTM D5185m >30	<b>2</b>	5	---
Lead	ppm ASTM D5185m >30	<b>&lt;1</b>	0	---
Copper	ppm ASTM D5185m >150	<b>9</b>	2	---
Tin	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	---
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	---
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>1</b>	13	---
Barium	ppm ASTM D5185m 0	<b>7</b>	0	---
Molybdenum	ppm ASTM D5185m 60	<b>8</b>	45	---
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	---
Magnesium	ppm ASTM D5185m 1010	<b>75</b>	312	---
Calcium	ppm ASTM D5185m 1070	<b>2186</b>	1893	---
Phosphorus	ppm ASTM D5185m 1150	<b>718</b>	1061	---
Zinc	ppm ASTM D5185m 1270	<b>957</b>	1251	---
Sulfur	ppm ASTM D5185m 2060	<b>2784</b>	3297	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>17</b>	7	---
Sodium	ppm ASTM D5185m	<b>0</b>	1	---
Potassium	ppm ASTM D5185m >20	<b>2</b>	3	---

## INFRA-RED

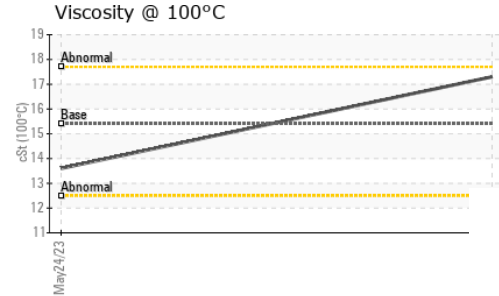
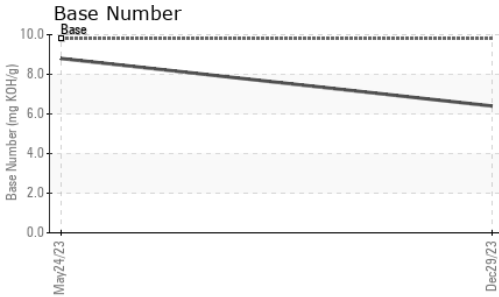
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.2	---
Nitration	Abs/cm *ASTM D7624 >20	<b>4.1</b>	6.1	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>11.9</b>	16.2	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>5.0</b>	10.2	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>6.4</b>	8.8	---



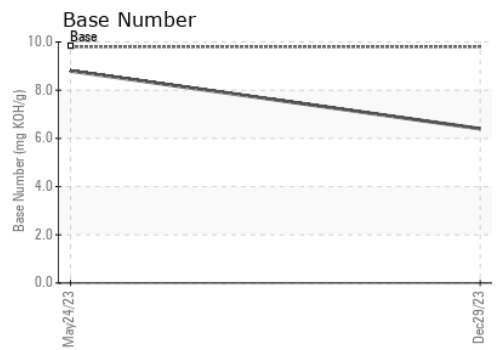
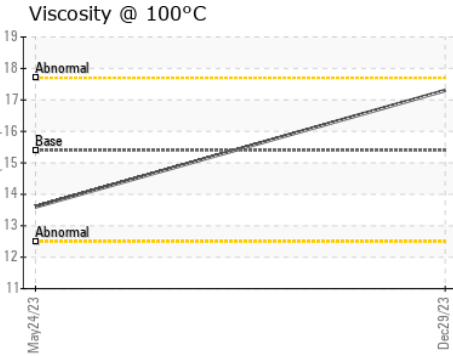
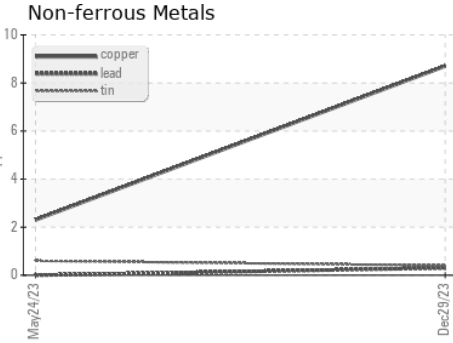
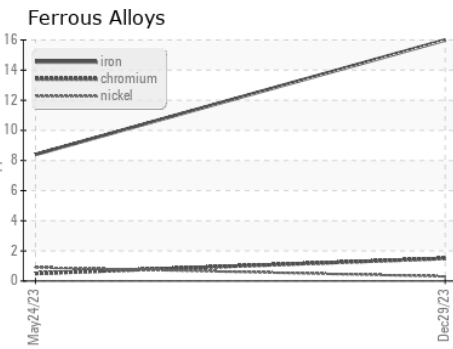
# OIL ANALYSIS REPORT



VISUAL	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	15.4	<b>17.3</b>	13.6	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0066582 **Received** : 08 Jan 2024  
**Lab Number** : **06053450** **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10819399 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 980 - Northside Hauling**  
 1820 Candle Ridge Park Dr  
 Houston, TX  
 US 77073  
 Contact: Edwin Collins  
 ecolins@gflenv.com  
 T:  
 F:

Certificate L2367  
 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)