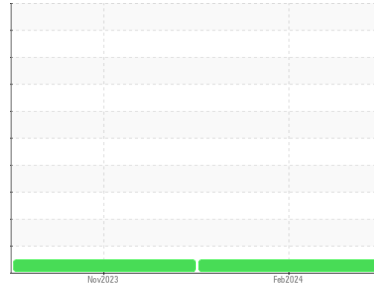




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**523105**

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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0107106</b>	GFL0091081	---
Sample Date	Client Info		<b>24 Feb 2024</b>	01 Nov 2023	---
Machine Age	hrs	Client Info	<b>1199</b>	533	---
Oil Age	hrs	Client Info	<b>666</b>	533	---
Oil Changed	Client Info		<b>Changed</b>	N/A	---
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 >110	<b>49</b>	43	---
Chromium	ppm	ASTM D5185m >4	<b>2</b>	3	---
Nickel	ppm	ASTM D5185m >2	<b>2</b>	2	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	3	---
Lead	ppm	ASTM D5185m >45	<b>3</b>	6	---
Copper	ppm	ASTM D5185m >85	<b>8</b>	20	---
Tin	ppm	ASTM D5185m >4	<b>2</b>	4	---
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 0	<b>&lt;1</b>	2	---
Barium	ppm	ASTM D5185m 0	<b>4</b>	17	---
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	49	---
Manganese	ppm	ASTM D5185m 0	<b>2</b>	4	---
Magnesium	ppm	ASTM D5185m 1010	<b>1047</b>	810	---
Calcium	ppm	ASTM D5185m 1070	<b>1300</b>	1428	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1096</b>	929	---
Zinc	ppm	ASTM D5185m 1270	<b>1299</b>	1224	---
Sulfur	ppm	ASTM D5185m 2060	<b>2955</b>	2783	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>13</b>	29	---
Sodium	ppm	ASTM D5185m	<b>6</b>	6	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	8	---

## INFRA-RED

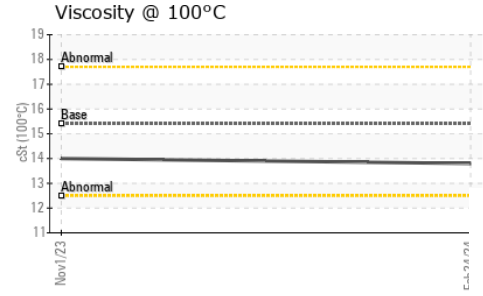
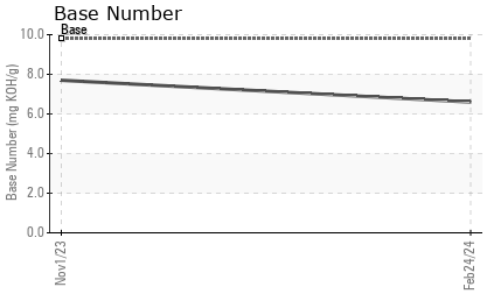
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.2</b>	0.9	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.5</b>	9.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.6</b>	21.0	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.8</b>	15.3	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.6</b>	7.7	---



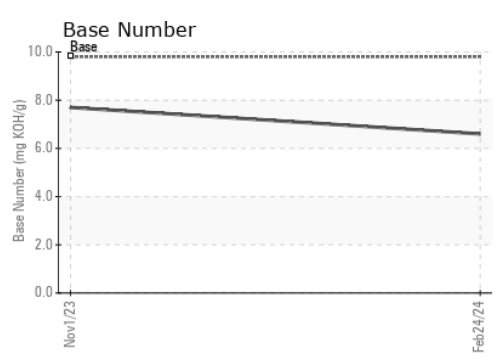
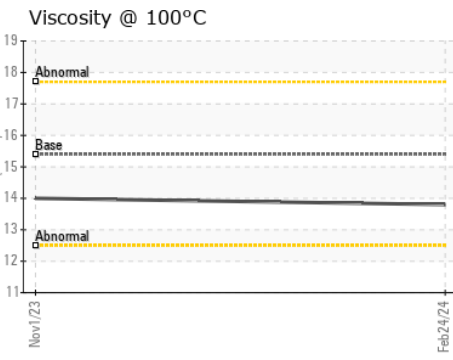
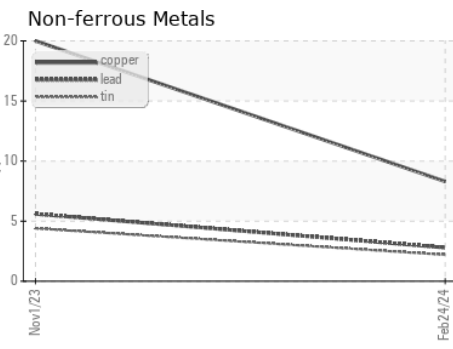
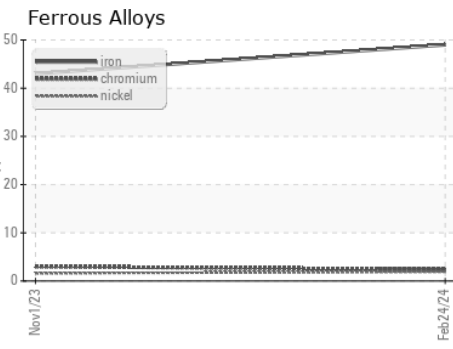
# OIL ANALYSIS REPORT



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>13.8</b>	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107106 **Received** : 04 Mar 2024  
**Lab Number** : 06108030 **Tested** : 05 Mar 2024  
**Unique Number** : 10911527 **Diagnosed** : 05 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 996 - Viroqua WI Southwest**  
 950 Nelson Parkway  
 Viroqua, WI  
 US 54665  
 Contact: Shawn Burke  
 sburke@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)