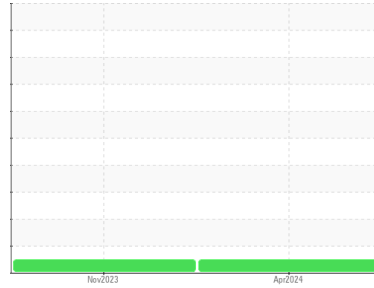




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**720070**

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>GFL0111236</b>	GFL0087955	---
Sample Date	Client Info		<b>10 Apr 2024</b>	27 Nov 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>600</b>	600	---
Oil Changed	Client Info		<b>Changed</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 >110	<b>20</b>	9	---
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	2	---
Lead	ppm	ASTM D5185m >45	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >85	<b>1</b>	<1	---
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	2	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 60	<b>58</b>	55	---
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m 1010	<b>960</b>	944	---
Calcium	ppm	ASTM D5185m 1070	<b>1095</b>	1060	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1003</b>	1025	---
Zinc	ppm	ASTM D5185m 1270	<b>1204</b>	1248	---
Sulfur	ppm	ASTM D5185m 2060	<b>3448</b>	2983	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>5</b>	3	---
Sodium	ppm	ASTM D5185m	<b>5</b>	4	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---

## INFRA-RED

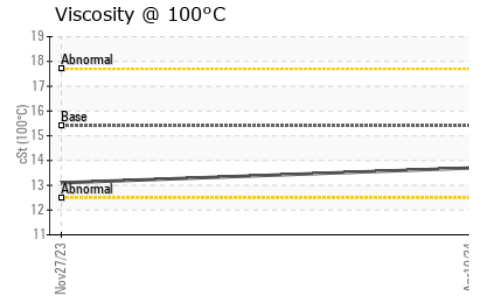
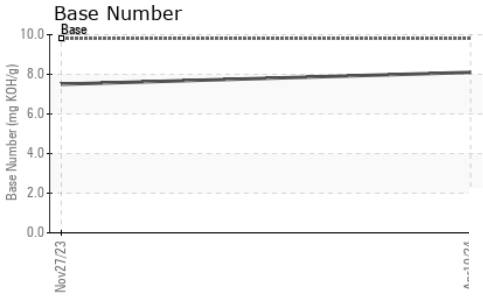
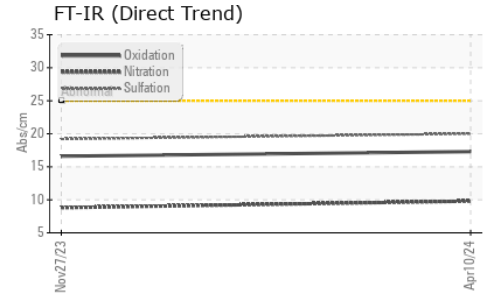
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.8</b>	8.8	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.0</b>	19.2	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.3</b>	16.6	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.1</b>	7.5	---



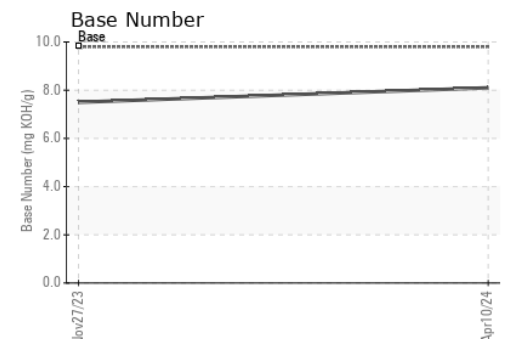
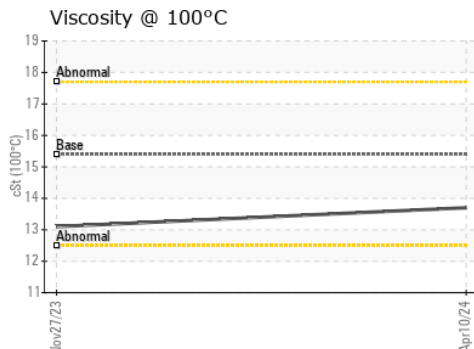
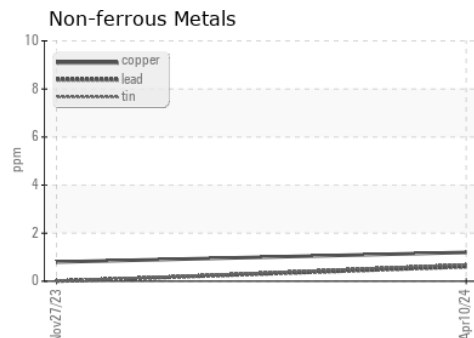
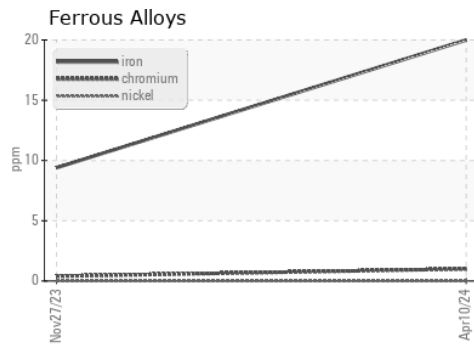
# OIL ANALYSIS REPORT



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	13.7	13.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111236      **Received** : 19 Apr 2024  
**Lab Number** : 06154088      **Tested** : 22 Apr 2024  
**Unique Number** : 10989511      **Diagnosed** : 22 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 960B - Pittsfield HC**  
 1335 W. Washington  
 Pittsfield, IL  
 US 62363

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: David Bradshaw  
david.bradshaw@gflenv.com

\* - 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)

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F: