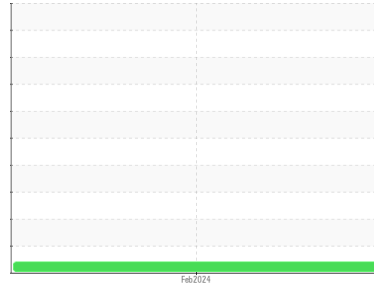




# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**714044**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0110137</b>	---	---
Sample Date	Client Info	<b>06 Feb 2024</b>	---	---
Machine Age	hrs Client Info	<b>49</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>Not Changed</b>	---	---
Sample Status		<b>ATTENTION</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	---	---
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	<b>18</b>	---	---
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >2	<b>1</b>	---	---
Titanium	ppm ASTM D5185m	<b>0</b>	---	---
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185m >30	<b>7</b>	---	---
Lead	ppm ASTM D5185m >30	<b>0</b>	---	---
Copper	ppm ASTM D5185m >150	<b>7</b>	---	---
Tin	ppm ASTM D5185m >5	<b>1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>393</b>	---	---
Barium	ppm ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 60	<b>112</b>	---	---
Manganese	ppm ASTM D5185m 0	<b>4</b>	---	---
Magnesium	ppm ASTM D5185m 1010	<b>713</b>	---	---
Calcium	ppm ASTM D5185m 1070	<b>1294</b>	---	---
Phosphorus	ppm ASTM D5185m 1150	<b>723</b>	---	---
Zinc	ppm ASTM D5185m 1270	<b>819</b>	---	---
Sulfur	ppm ASTM D5185m 2060	<b>2377</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>52</b>	---	---
Sodium	ppm ASTM D5185m	<b>2</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>9</b>	---	---
Fuel	% ASTM D3524 >5	<b>0.4</b>	---	---

## INFRA-RED

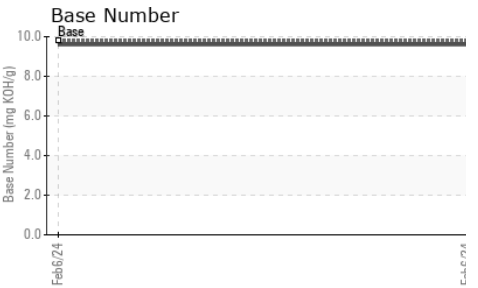
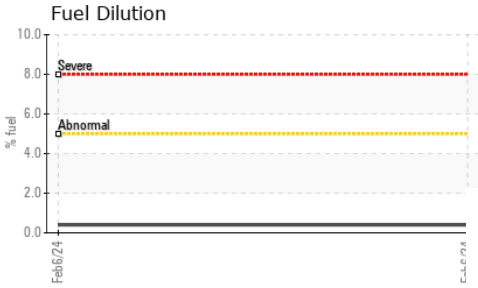
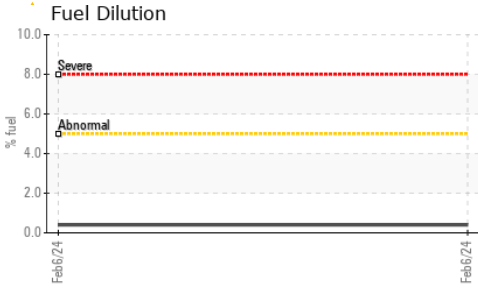
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>5.8</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>24.6</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.2</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.6</b>	---	---



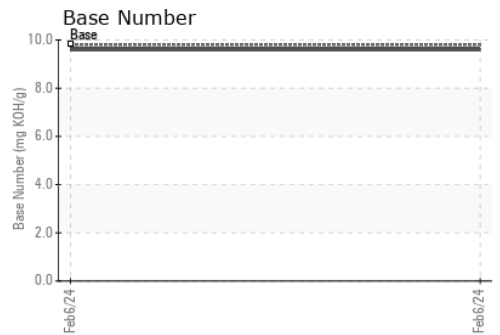
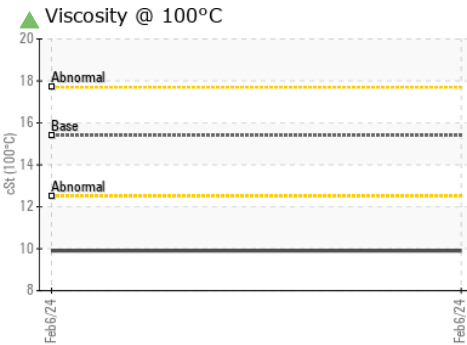
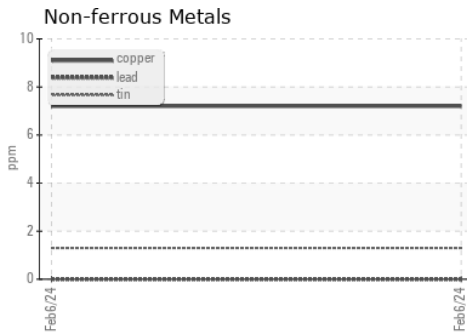
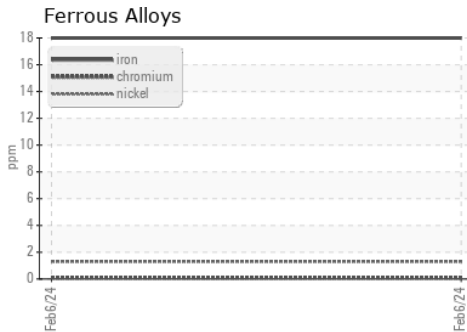
# OIL ANALYSIS REPORT



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 ▲ 9.9	---	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110137 **Received** : 12 Feb 2024  
**Lab Number** : 06085774 **Tested** : 14 Feb 2024  
**Unique Number** : 10873219 **Diagnosed** : 14 Feb 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 916 - Greenbay HC**  
 1799 County Trunk PP  
 DePere, WI  
 US 54115  
 Contact: Travis Runge  
 travis.runge@gflenv.com  
 T: (920)351-2341  
 F:

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)