



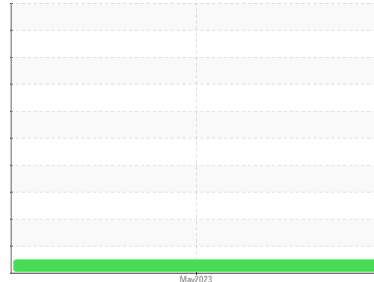
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**570M**  
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>GFL0069882</b>	---	---
Sample Date	Client Info		<b>03 May 2023</b>	---	---
Machine Age	hrs Client Info		<b>10048</b>	---	---
Oil Age	hrs Client Info		<b>600</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>90	<b>14</b>	---	---
Chromium	ppm ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m	>2	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m	>2	<b>0</b>	---	---
Silver	ppm ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m	>20	<b>3</b>	---	---
Lead	ppm ASTM D5185m	>40	<b>0</b>	---	---
Copper	ppm ASTM D5185m	>330	<b>0</b>	---	---
Tin	ppm ASTM D5185m	>15	<b>&lt;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>7</b>	---	---
Barium	ppm ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	60	<b>62</b>	---	---
Manganese	ppm ASTM D5185m	0	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m	1010	<b>975</b>	---	---
Calcium	ppm ASTM D5185m	1070	<b>1113</b>	---	---
Phosphorus	ppm ASTM D5185m	1150	<b>1130</b>	---	---
Zinc	ppm ASTM D5185m	1270	<b>1362</b>	---	---
Sulfur	ppm ASTM D5185m	2060	<b>3173</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	<b>4</b>	---	---
Sodium	ppm ASTM D5185m		<b>3</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>2</b>	---	---

## INFRA-RED

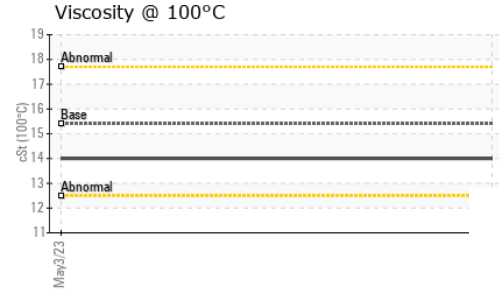
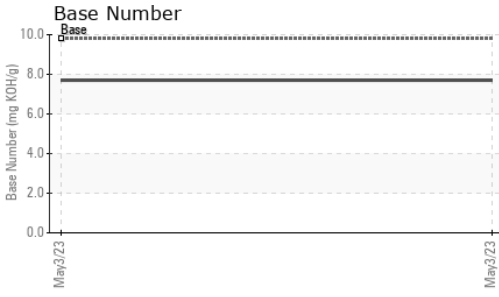
	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>6	<b>0.3</b>	---	---
Nitration	Abs/cm *ASTM D7624	>20	<b>9.6</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	<b>18.8</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>16.3</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896	9.8	<b>7.7</b>	---	---



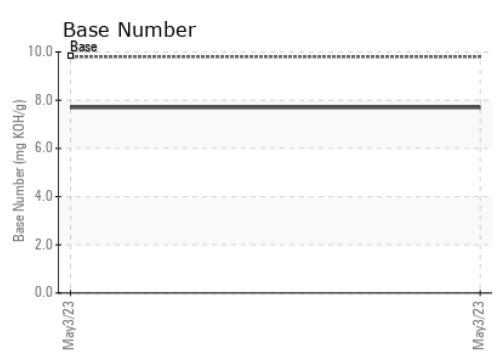
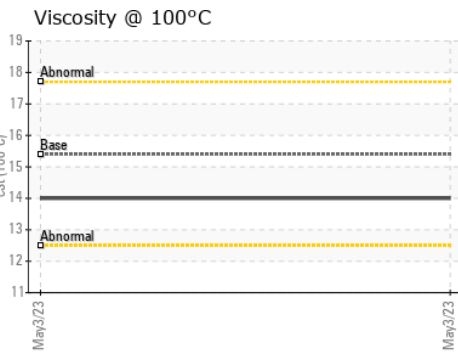
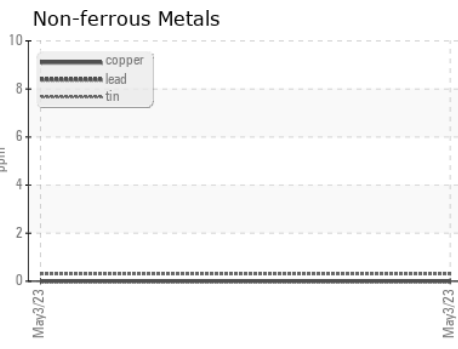
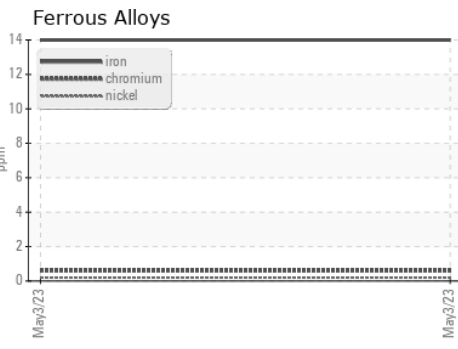
# OIL ANALYSIS REPORT



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	<b>14.0</b>	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0069882 **Received** : 20 Oct 2023  
**Lab Number** : **05984426** **Diagnosed** : 20 Oct 2023  
**Unique Number** : 10701721 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 418 - Metro/MI East**  
 22001 Hoover Dr  
 Warren, MI  
 US 48089  
 Contact: JIM HESS  
 jhess@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)