



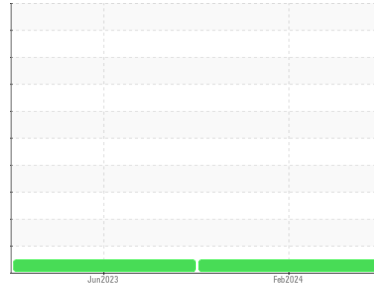
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**1108M**  
 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>GFL0110136</b>	GFL0069847	---
Sample Date	Client Info		<b>06 Feb 2024</b>	01 Jun 2023	---
Machine Age	hrs	Client Info	<b>12837</b>	12753	---
Oil Age	hrs	Client Info	<b>84</b>	600	---
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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	>200	<b>7</b>	7	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	1	---
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>30	<b>2</b>	1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>2</b>	2	---
Barium	ppm	ASTM D5185m	0	<b>13</b>	0	---
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	58	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	1010	<b>882</b>	938	---
Calcium	ppm	ASTM D5185m	1070	<b>1058</b>	1106	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1018</b>	997	---
Zinc	ppm	ASTM D5185m	1270	<b>1171</b>	1263	---
Sulfur	ppm	ASTM D5185m	2060	<b>3328</b>	3624	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>4</b>	4	---
Sodium	ppm	ASTM D5185m		<b>0</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	---

## INFRA-RED

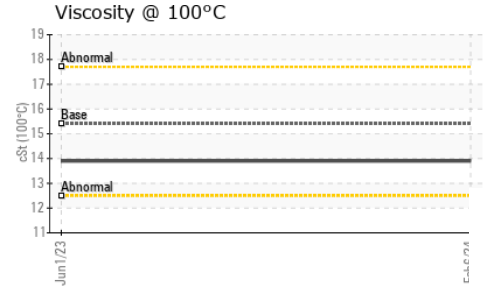
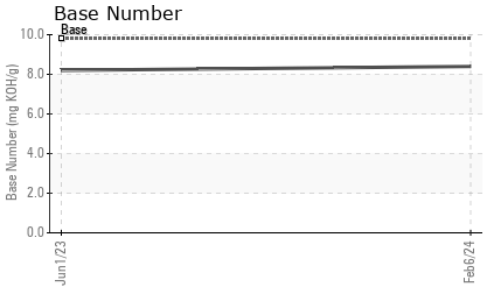
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	19.6	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.1</b>	16.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	8.2	---



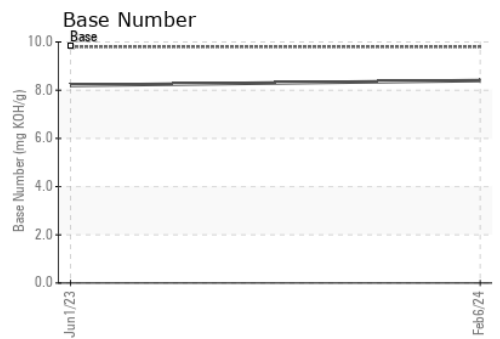
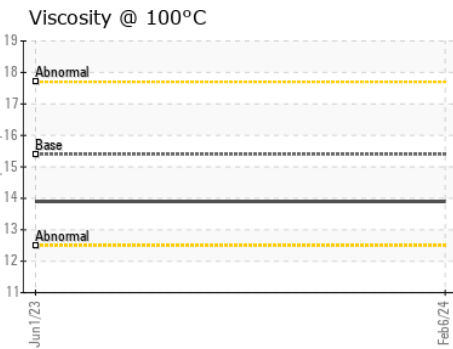
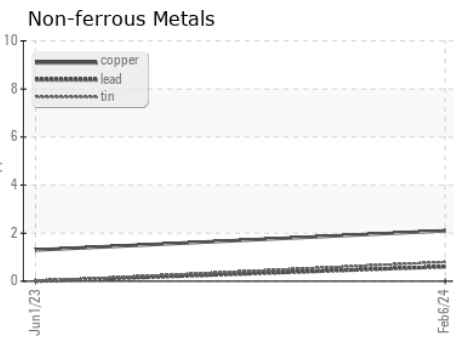
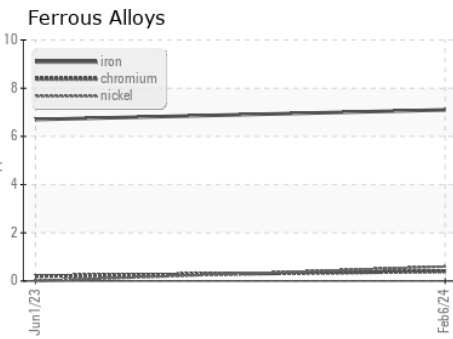
# OIL ANALYSIS REPORT



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>13.9</b>	13.9	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110136 **Received** : 12 Feb 2024  
**Lab Number** : 06085756 **Tested** : 12 Feb 2024  
**Unique Number** : 10873201 **Diagnosed** : 12 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 468 - Dearborn**  
 3051 Schaefer Rd  
 Dearborn, MI  
 US 48126  
 Contact:

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)

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