



# OIL ANALYSIS REPORT

Sample Rating Trend

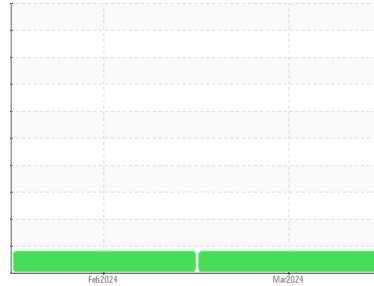
**WEAR**



Machine Id  
**911055**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (7 GAL)**



## DIAGNOSIS

### Recommendation

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

### Wear

The iron level is abnormal. All other 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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0068846</b>	GFL0068898	---
Sample Date	Client Info		<b>01 Mar 2024</b>	19 Feb 2024	---
Machine Age	hrs	Client Info	<b>8596</b>	8521	---
Oil Age	hrs	Client Info	<b>75</b>	8521	---
Oil Changed	Client Info		<b>Not Changed</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

## 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 >100	<b>▲ 133</b>	▲ 122	---
Chromium	ppm	ASTM D5185m >20	<b>9</b>	8	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>13</b>	12	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	---
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	---
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>5</b>	6	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	59	---
Manganese	ppm	ASTM D5185m 0	<b>1</b>	1	---
Magnesium	ppm	ASTM D5185m 1010	<b>946</b>	962	---
Calcium	ppm	ASTM D5185m 1070	<b>1060</b>	1011	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1031</b>	1037	---
Zinc	ppm	ASTM D5185m 1270	<b>1167</b>	1272	---
Sulfur	ppm	ASTM D5185m 2060	<b>3139</b>	3152	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	---
Sodium	ppm	ASTM D5185m	<b>3</b>	6	---
Potassium	ppm	ASTM D5185m >20	<b>20</b>	21	---

## INFRA-RED

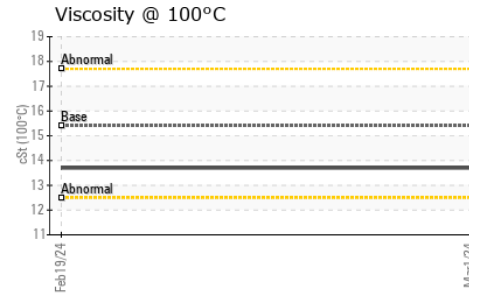
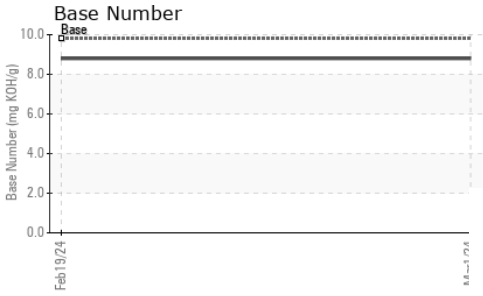
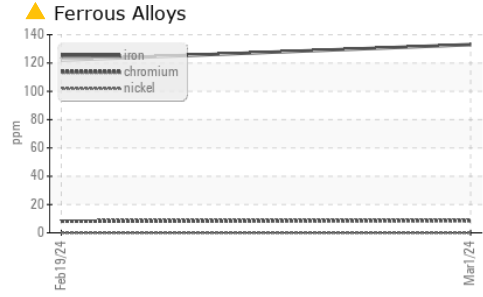
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.4</b>	5.8	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.9</b>	17.4	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.4</b>	12.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.8</b>	8.8	---



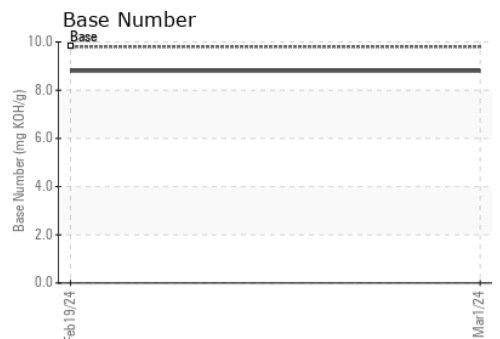
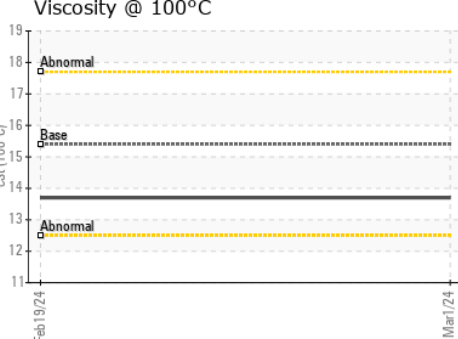
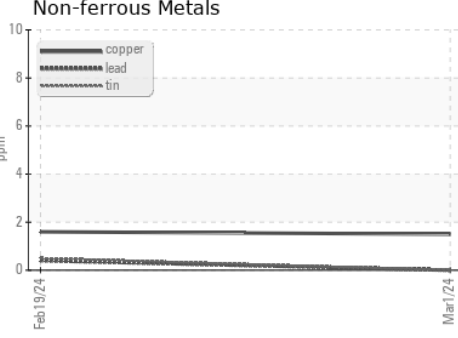
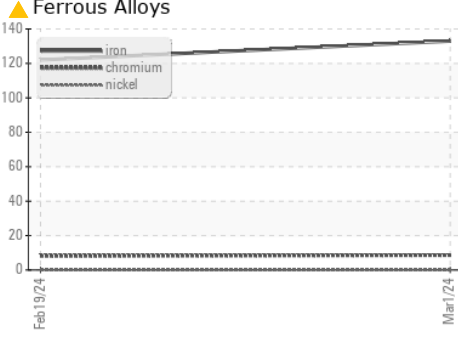
# OIL ANALYSIS REPORT



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	13.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0068846 **Received** : 07 Mar 2024  
**Lab Number** : 06111040 **Tested** : 07 Mar 2024  
**Unique Number** : 10914537 **Diagnosed** : 09 Mar 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 073 - Warner Robins - Transwaste**  
 155 Story Road  
 Warner Robins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@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)