



# OIL ANALYSIS REPORT

Sample Rating Trend

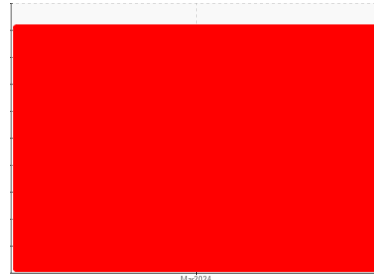
GLYCOL



Machine Id  
**116005**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

### Wear

Metal levels are typical for a new component breaking in.

### ▲ Contamination

Test for glycol is positive. Light fuel dilution occurring. There is a high concentration of glycol present in the oil. No other contaminants were detected in the oil.

### ● Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0107890</b>	---	---
Sample Date	Client Info		<b>04 Mar 2024</b>	---	---
Machine Age	kms	Client Info	<b>63571</b>	---	---
Oil Age	kms	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>30</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	---
Copper	ppm	ASTM D5185(m)	>330	<b>8</b>	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<b>6</b>	---
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>66</b>	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---
Magnesium	ppm	ASTM D5185(m)	950	<b>915</b>	---
Calcium	ppm	ASTM D5185(m)	1050	<b>990</b>	---
Phosphorus	ppm	ASTM D5185(m)	995	<b>971</b>	---
Zinc	ppm	ASTM D5185(m)	1180	<b>1146</b>	---
Sulfur	ppm	ASTM D5185(m)	2600	<b>2430</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## CONTAMINANTS

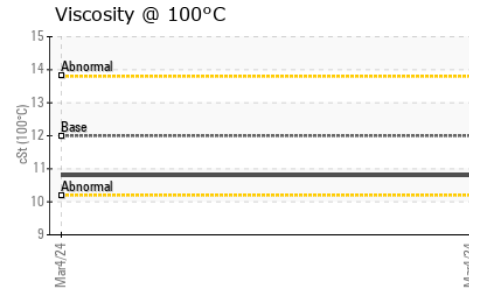
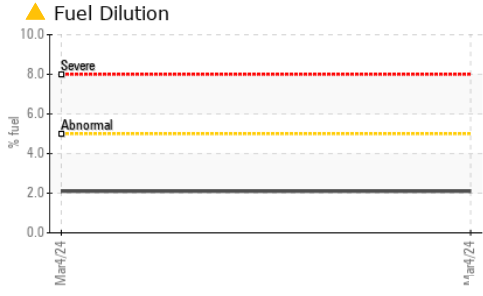
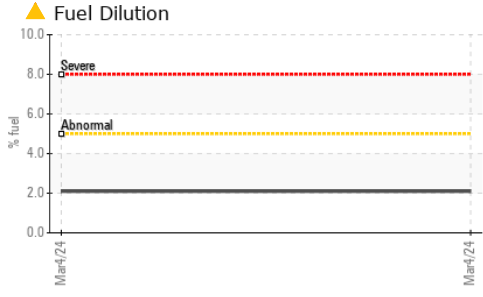
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	---
Sodium	ppm	ASTM D5185(m)		<b>199</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>271</b>	---
Fuel	%	ASTM D7593*	>5	<b>2.1</b>	---
Glycol	%	ASTM D7922*		<b>0.176</b>	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.5</b>	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.7</b>	---



# OIL ANALYSIS REPORT

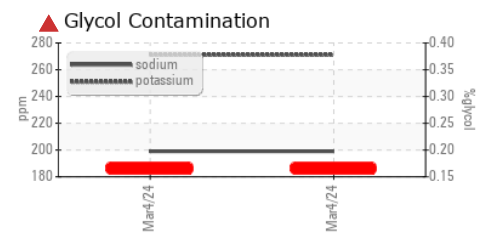
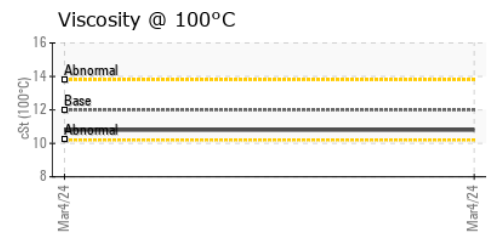
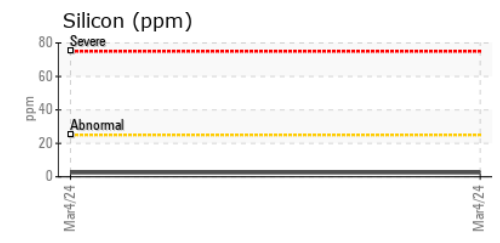
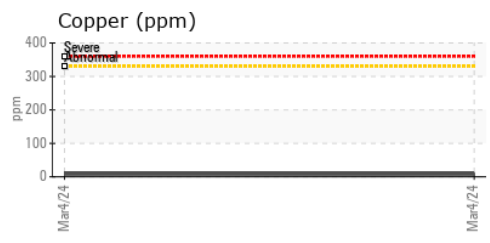
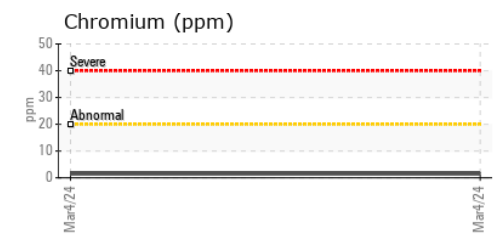
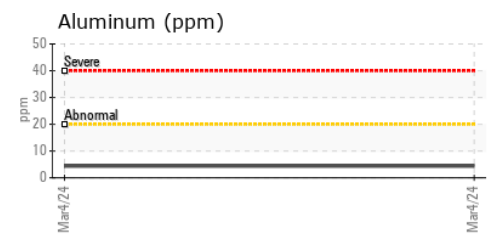
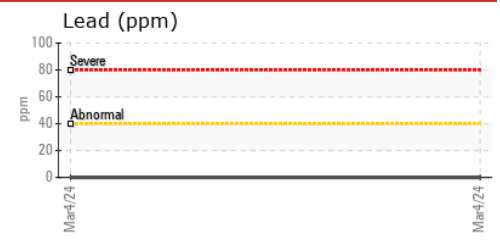
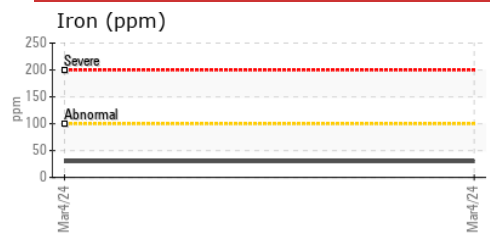


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.0</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.8</b>	---	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 310 - Winnipeg**  
**Sample No.** : GFL0107890 **Received** : 26 Mar 2024 **#360 - 555 Hervo Street,**  
**Lab Number** : 02624533 **Tested** : 27 Mar 2024 **Winnipeg, MB**  
**Unique Number** : 5749652 **Diagnosed** : 27 Mar 2024 - Kevin Marson **CA R3T 3L6**  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel, Visual ) **Contact: Joshua Lourenco**  
*To discuss this sample report, contact Customer Service at 1-800-268-2131.* **jlourenco@gflenv.com**  
*Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.* **T: (204)987-9600**  
*Validity of results and interpretation are based on the sample and information as supplied.* **F:**