



# OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Area  
**[1155601]**  
Machine Id  
**201069**

Component  
**Diesel Engine**  
Fluid

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



## DIAGNOSIS

### Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. 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>GFL0089026</b>	---	---
Sample Date	Client Info	<b>03 Oct 2023</b>	---	---
Machine Age	hrs Client Info	<b>15976</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>SEVERE</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>27</b>	---	---
Chromium	ppm ASTM D5185(m) >20	<b>1</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>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185(m) >20	<b>2</b>	---	---
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</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) 0	<b>2</b>	---	---
Barium	ppm ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Molybdenum	ppm ASTM D5185(m) 60	<b>51</b>	---	---
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm ASTM D5185(m) 1010	<b>815</b>	---	---
Calcium	ppm ASTM D5185(m) 1070	<b>886</b>	---	---
Phosphorus	ppm ASTM D5185(m) 1150	<b>830</b>	---	---
Zinc	ppm ASTM D5185(m) 1270	<b>1002</b>	---	---
Sulfur	ppm ASTM D5185(m) 2060	<b>2087</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>4</b>	---	---
Sodium	ppm ASTM D5185(m)	<b>7</b>	---	---
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	---	---
Fuel	% ASTM D7593* >5	<b>10.7</b>	---	---

## INFRA-RED

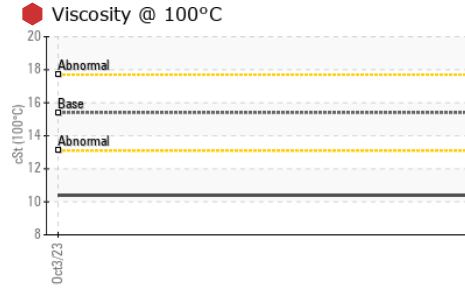
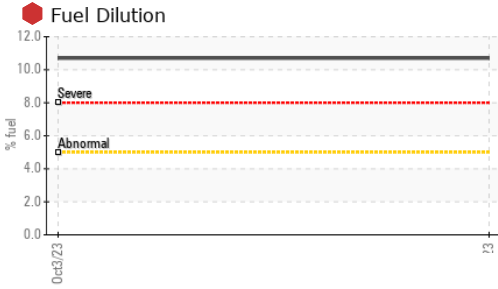
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.3</b>	---	---
Nitration	Abs/cm ASTM D7624* >20	<b>11.0</b>	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	<b>25.5</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>29.7</b>	---	---



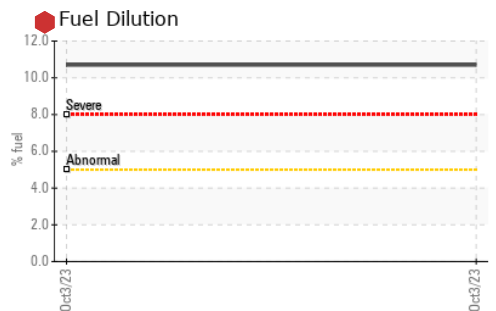
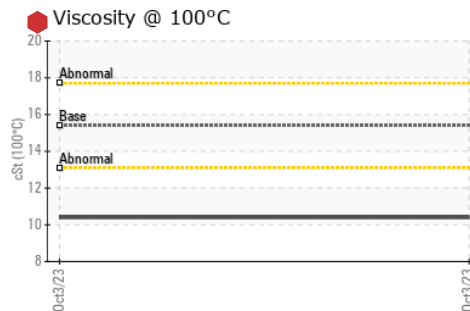
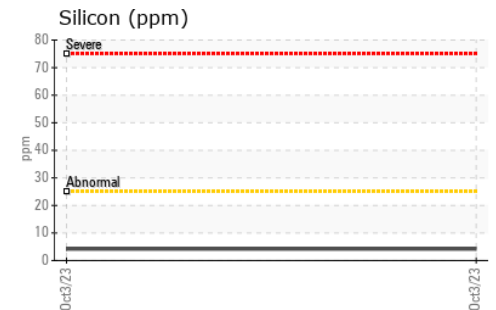
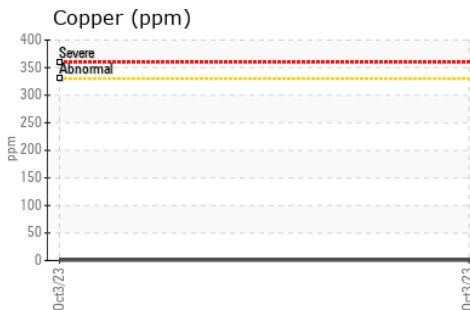
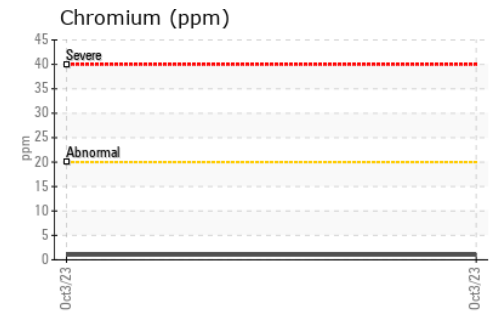
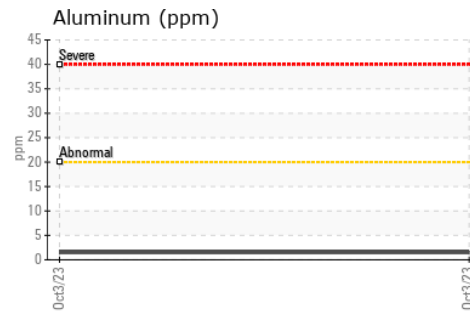
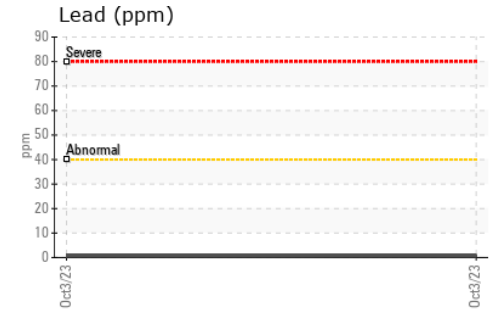
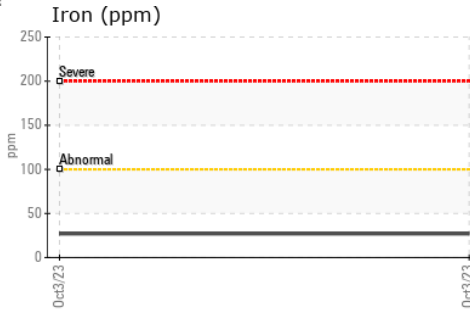
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	15.4	10.4	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 207 - Pickering SW**  
**Sample No.** : GFL0089026 **Received** : 04 Oct 2023 **1034 TOY AVENUE, PICKERING YARD**  
**Lab Number** : 02586705 **Diagnosed** : 05 Oct 2023 **PICKERING, ON**  
**Unique Number** : 5655771 **Diagnostician** : Kevin Marson **CA L1W 3P1**  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel ) **Contact: Ian Patton**

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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