



# OIL ANALYSIS REPORT

Sample Rating Trend

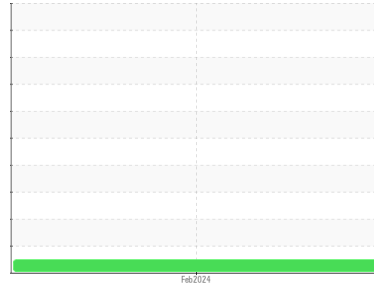
**NORMAL**



Area  
**[1221446]**  
Machine Id  
**101043**

Component  
**Diesel Engine**  
Fluid

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



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

### Fluid Condition

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>GFL0107933</b>	---	---
Sample Date	Client Info		<b>05 Feb 2024</b>	---	---
Machine Age	hrs	Client Info	<b>10575</b>	---	---
Oil Age	hrs	Client Info	<b>500</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >110	<b>25</b>	---	---
Chromium	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>7</b>	---	---
Lead	ppm	ASTM D5185(m) >45	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m) >85	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185(m) >4	<b>&lt;1</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>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 50	<b>61</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m) 950	<b>999</b>	---	---
Calcium	ppm	ASTM D5185(m) 1050	<b>1089</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 995	<b>1038</b>	---	---
Zinc	ppm	ASTM D5185(m) 1180	<b>1221</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2600	<b>2722</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

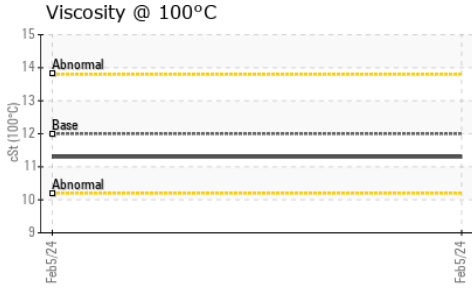
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >30	<b>4</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>4</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>12</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>9.5</b>	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>21.0</b>	---	---



# OIL ANALYSIS REPORT

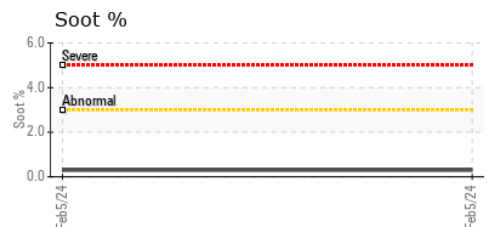
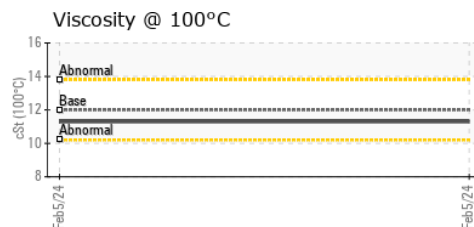
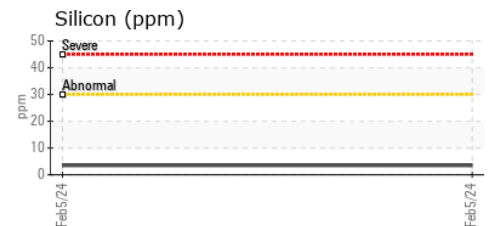
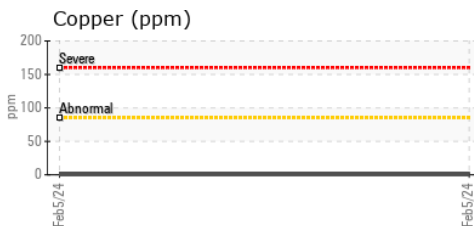
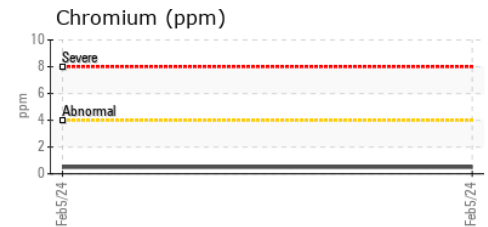
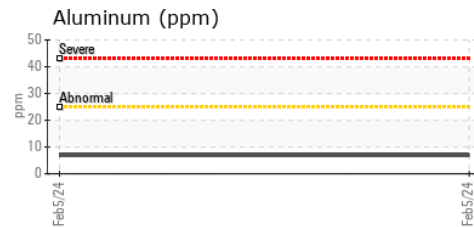
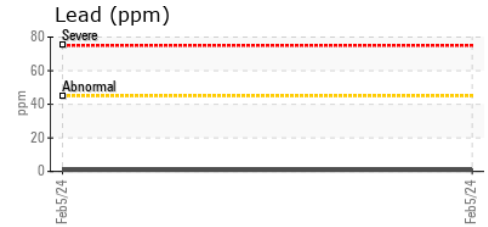
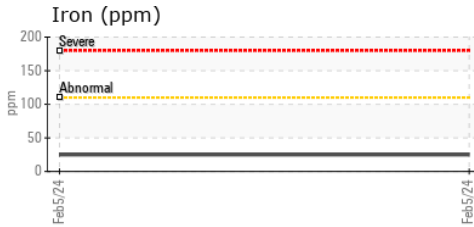


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.4</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</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>11.3</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0107933      **Received** : 13 Feb 2024  
**Lab Number** : **02615234**      **Tested** : 13 Feb 2024  
**Unique Number** : 5724329      **Diagnosed** : 13 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**GFL Environmental - 350 - Emerald Park Regina**  
 2B Industrial Drive., Great Plains Industrial Park,  
 Emerald Park, SK  
 CA S4L 1B6  
 Contact: Vaughn Hortness  
 vhortness@gflenv.com  
 T: (877)244-9500  
 F: (306)244-9501

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.