



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**512034**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0113118</b>	---	---
Sample Date		Client Info		<b>29 Feb 2024</b>	---	---
Machine Age	kms	Client Info		<b>85953</b>	---	---
Oil Age	kms	Client Info		<b>23881</b>	---	---
Filter Age	kms	Client Info		<b>23881</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>120	<b>15</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>6</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>33</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

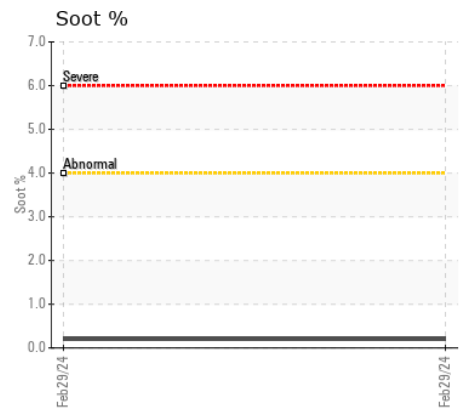
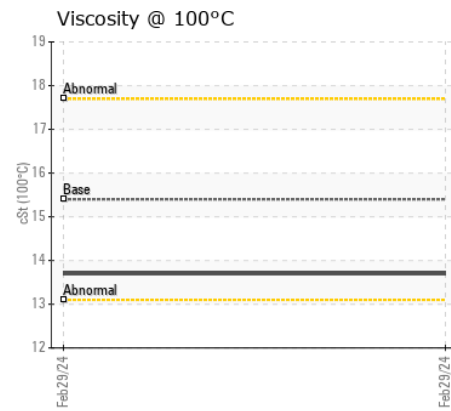
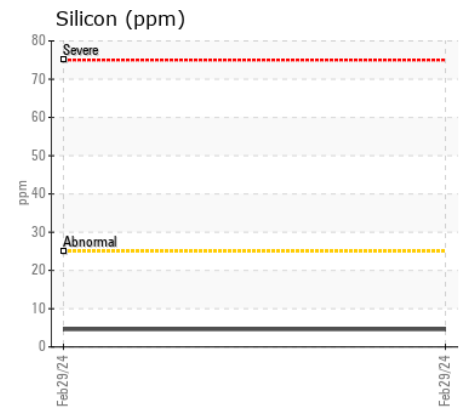
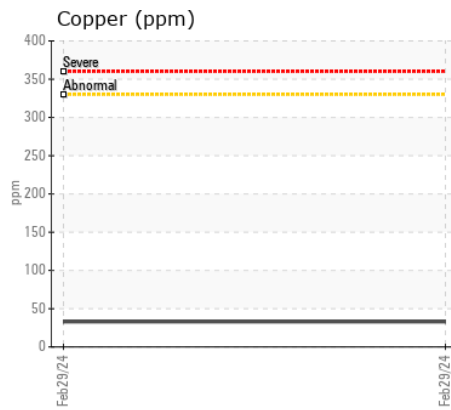
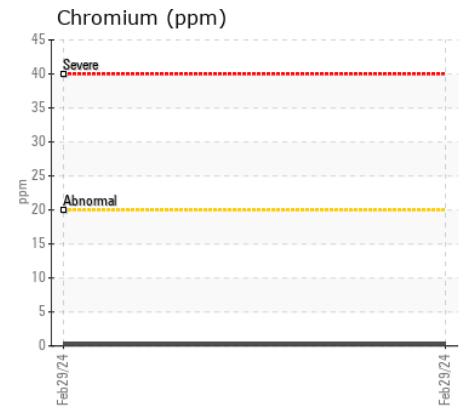
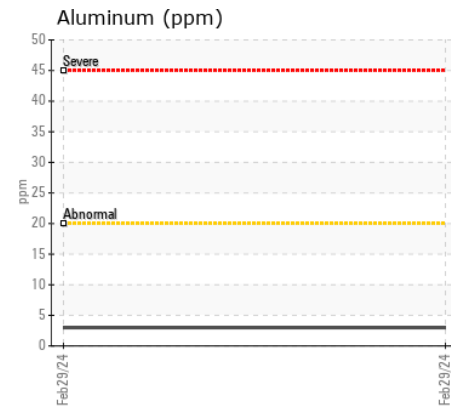
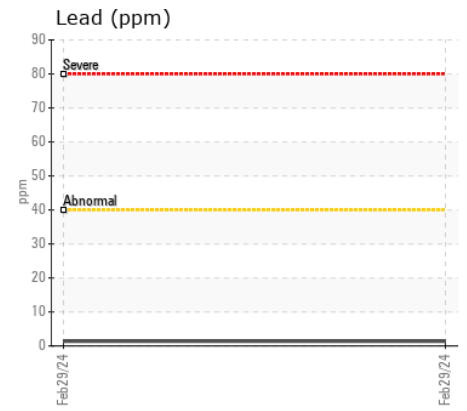
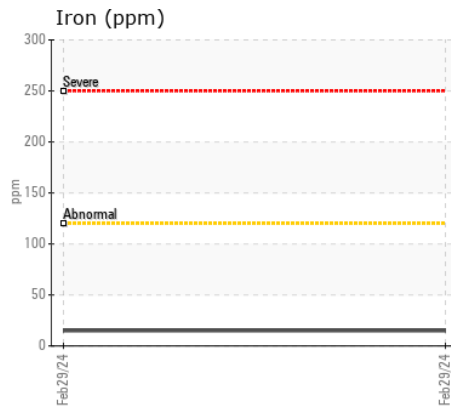
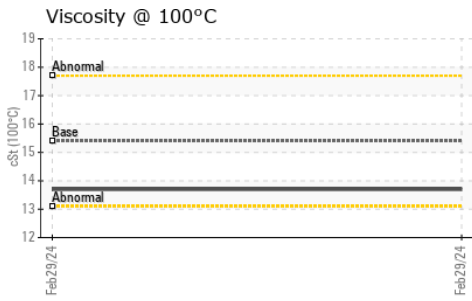
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	---	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.0</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	---	---
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>958</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1097</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>999</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1192</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2626</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.4</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.7</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113118  
**Lab Number** : 02619810  
**Unique Number** : 5736920  
**Test Package** : MOB 1  
**Received** : 05 Mar 2024  
**Tested** : 05 Mar 2024  
**Diagnosed** : 05 Mar 2024 - Wes Davis

**GFL Environmental - 582 - Nanaimo**  
 3469 Aqua Terra Rd.,  
 Cassidy, BC  
 CA V0R 1H0  
 Contact: Jonathan Hebden  
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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.