



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

Machine Id  
**101046**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0100591</b>	---	---
Sample Date		Client Info		<b>20 Jan 2024</b>	---	---
Machine Age	kms	Client Info		<b>164921</b>	---	---
Oil Age	kms	Client Info		<b>0</b>	---	---
Filter Age	kms	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>60</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>3</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>2</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>6</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>18</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>12</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>3</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

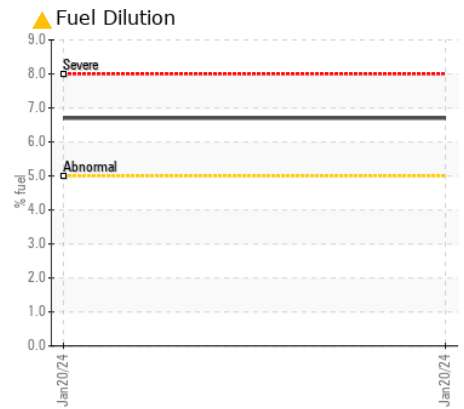
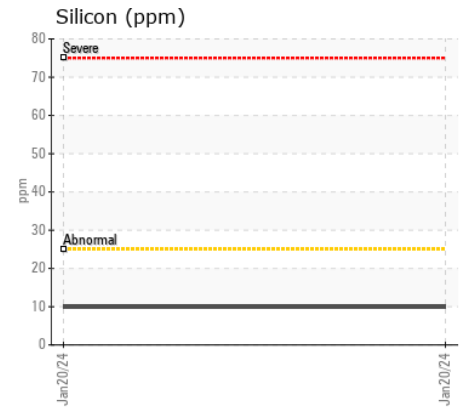
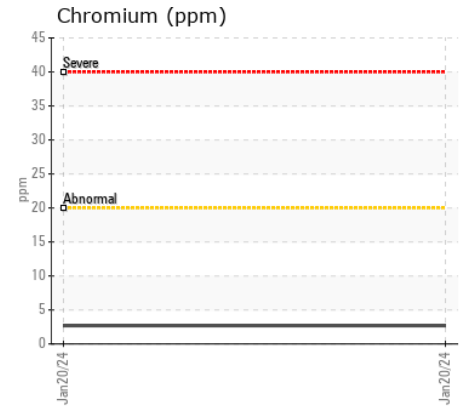
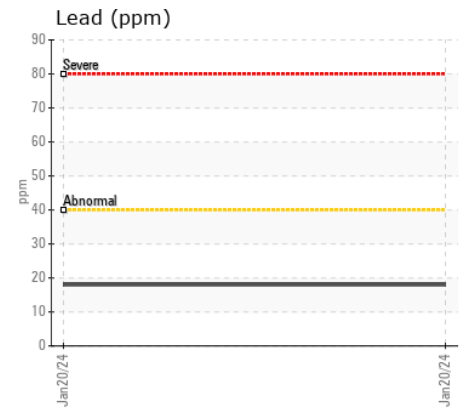
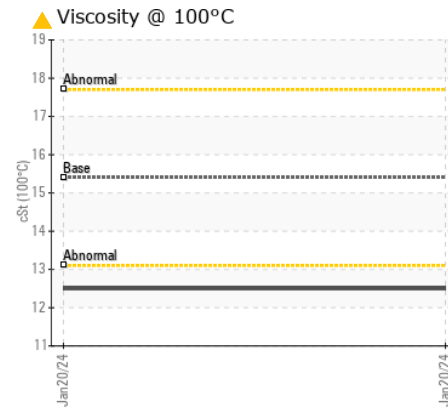
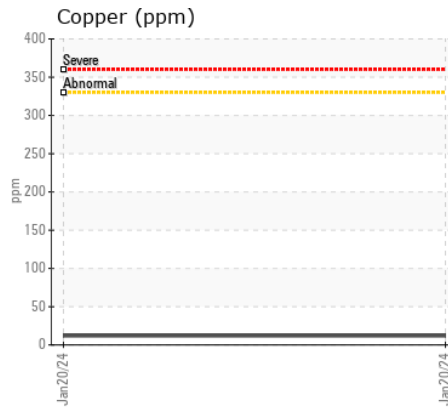
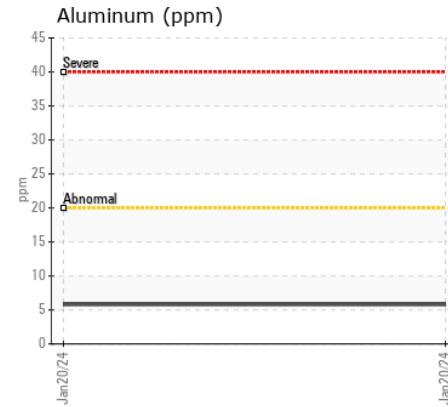
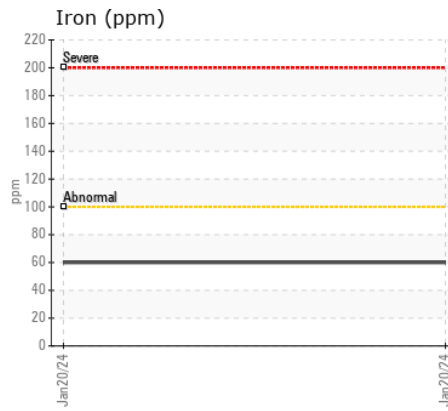
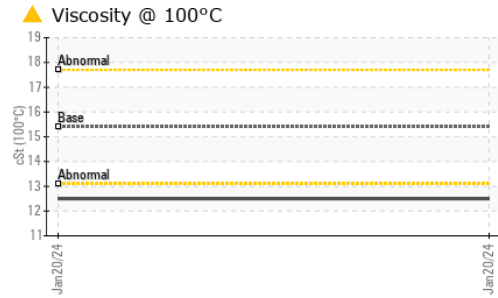
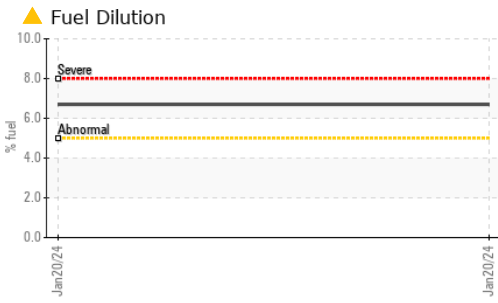
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Fuel	%	ASTM D7593*	>5	<b>▲ 6.7</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0.6</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.6</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.0</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**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.

Sodium	ppm	ASTM D5185(m)		<b>8</b>	---	---
Boron	ppm	ASTM D5185(m)	0	<b>5</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>50</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>845</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1003</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>849</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1038</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2123</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>27.6</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲ 12.5</b>	---	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling  
**Sample No.** : GFL0100591 **Received** : 24 Jan 2024  
**Lab Number** : 02610824 **Diagnosed** : 26 Jan 2024  
**Unique Number** : 5711910 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

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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