



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

Machine Id  
**424008**  
 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>GFL0082177</b>	GFL0046764	---
Sample Date		Client Info		<b>24 Jul 2023</b>	29 Jun 2022	---
Machine Age	hrs	Client Info		<b>36788</b>	35386	---
Oil Age	hrs	Client Info		<b>0</b>	1366	---
Filter Age	hrs	Client Info		<b>0</b>	1366	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>27</b>	23	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	3	---
Lead	ppm	ASTM D5185(m)	>40	<b>4</b>	5	---
Copper	ppm	ASTM D5185(m)	>330	<b>6</b>	8	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

**CONTAMINATION**

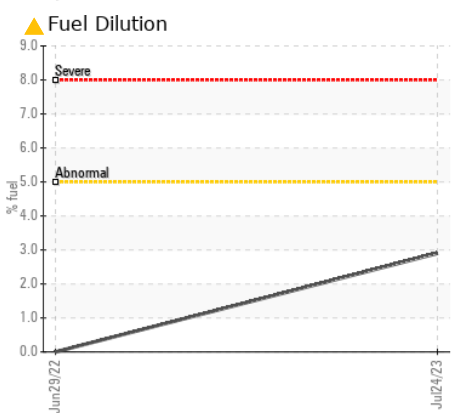
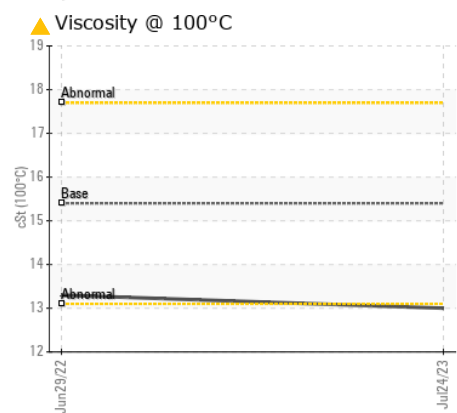
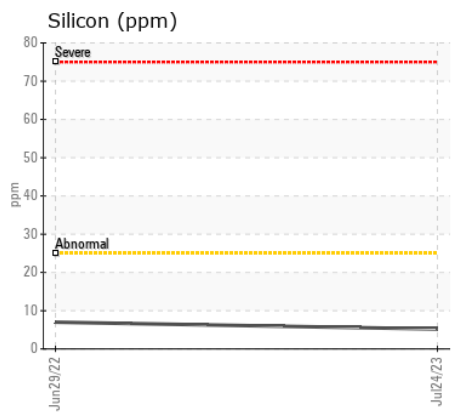
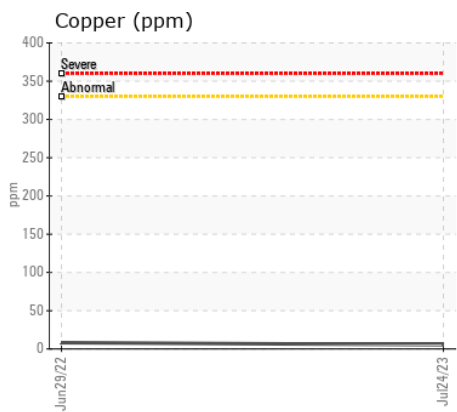
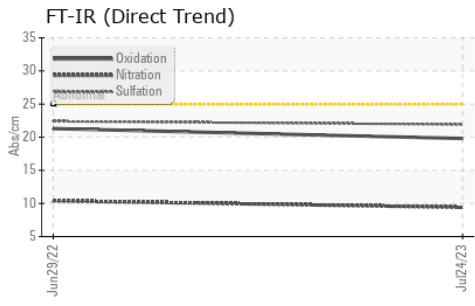
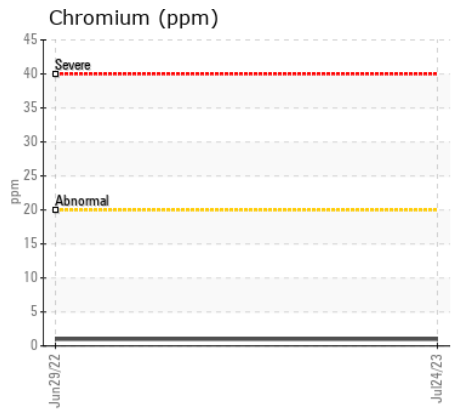
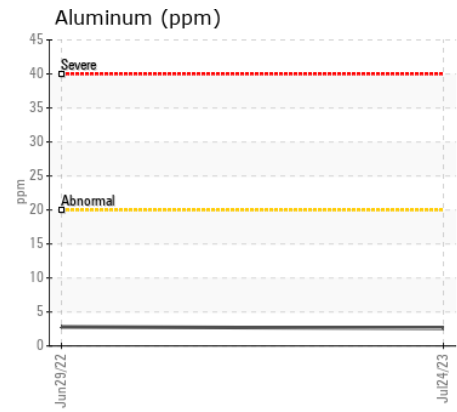
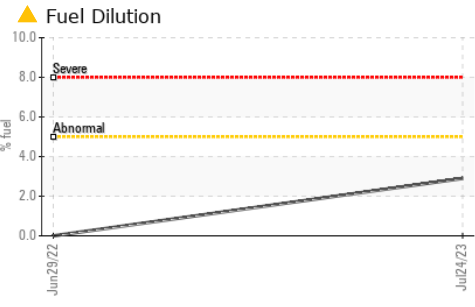
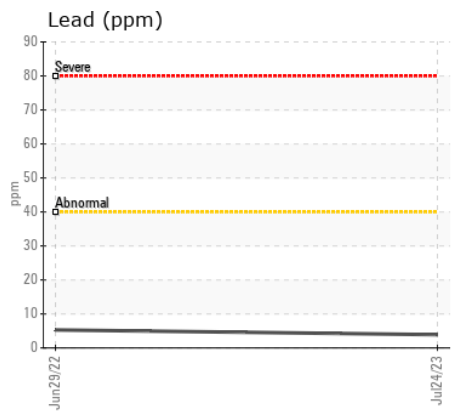
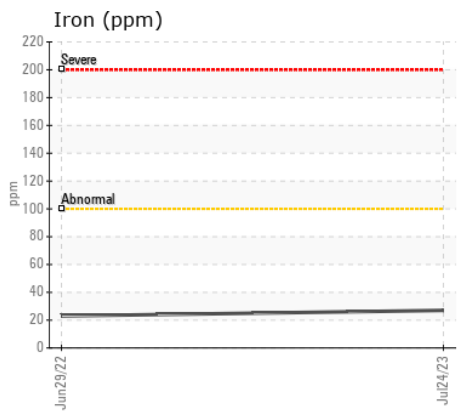
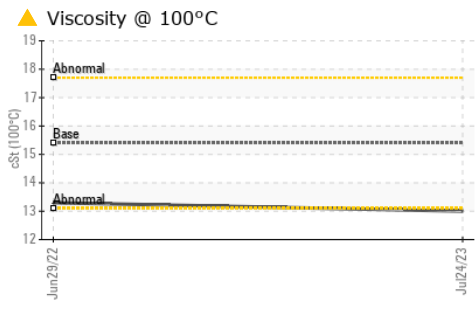
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	7	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Fuel	%	ASTM D7593*	>5	<b>▲ 2.9</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	10.4	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.9</b>	22.4	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	---
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	7	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	52	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>924</b>	890	---
Calcium	ppm	ASTM D5185(m)	1070	<b>970</b>	1102	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>997</b>	973	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1122</b>	1119	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2347</b>	2351	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.8</b>	21.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲ 13.0</b>	13.3	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0082177 **Received** : 28 Jul 2023  
**Lab Number** : 02572847 **Tested** : 31 Jul 2023  
**Unique Number** : 5617898 **Diagnosed** : 31 Jul 2023 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 582 - Nanaimo**  
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 Cassidy, BC  
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 wcgfldemo@gmail.com

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.