



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

Machine Id  
**401107**  
 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>GFL0096823</b>	GFL0084111	GFL0084041
Sample Date		Client Info		<b>06 Jun 2024</b>	02 Aug 2023	12 Jun 2023
Machine Age	hrs	Client Info		<b>1293</b>	34002	20416
Oil Age	hrs	Client Info		<b>601</b>	0	0
Filter Age	hrs	Client Info		<b>601</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>18</b>	14	42
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	4
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	1	4
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

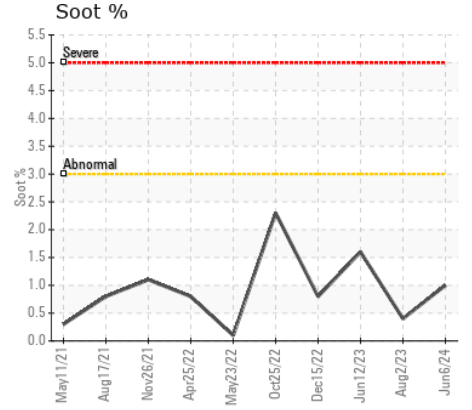
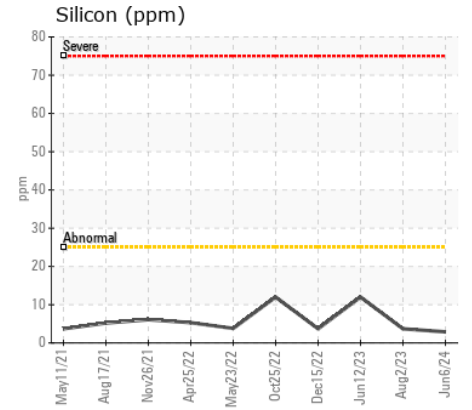
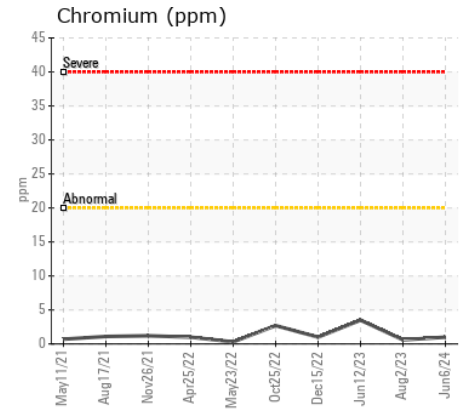
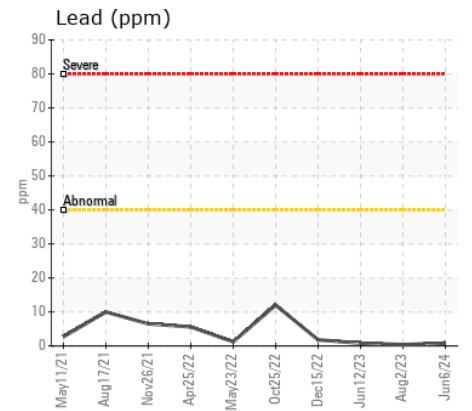
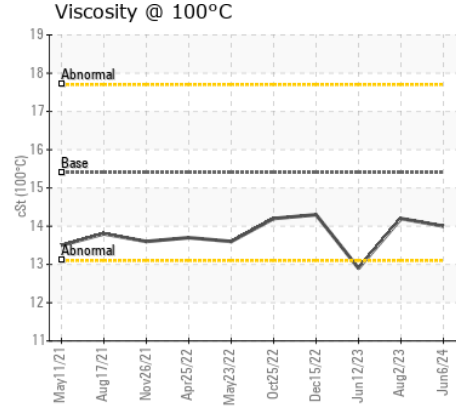
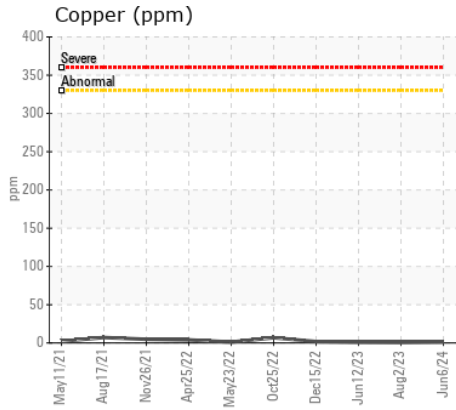
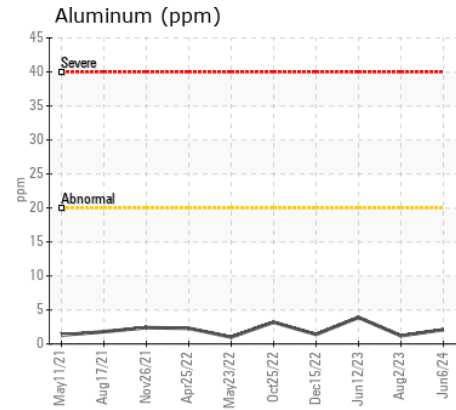
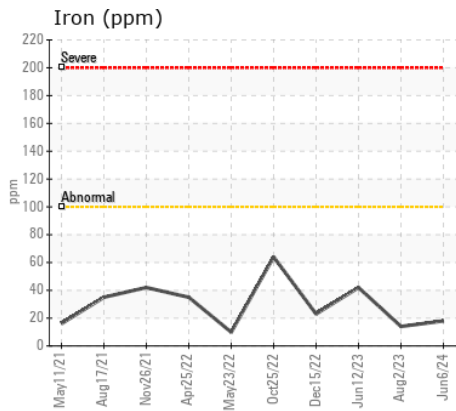
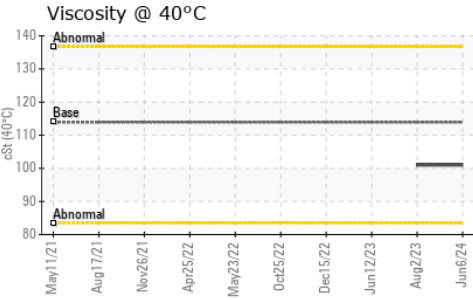
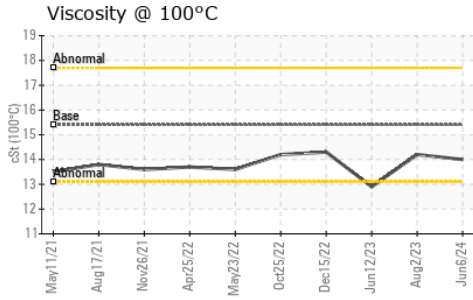
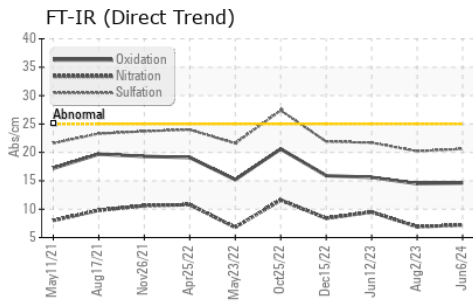
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	4	12
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	<1	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>1</b>	0.4	1.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.2</b>	6.9	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.6</b>	20.2	21.7
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>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185(m)		<b>4</b>	4	4
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	5	5
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	59	62
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>955</b>	967	991
Calcium	ppm	ASTM D5185(m)	1070	<b>1058</b>	1027	1075
Phosphorus	ppm	ASTM D5185(m)	1150	<b>980</b>	1046	1100
Zinc	ppm	ASTM D5185(m)	1270	<b>1189</b>	1173	1209
Sulfur	ppm	ASTM D5185(m)	2060	<b>2544</b>	2564	2634
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.6</b>	14.5	15.6
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	<b>101</b>	101	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.0</b>	14.2	▲ 12.9
Viscosity Index (VI)	Scale	ASTM D2270*	142	<b>140</b>	143	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0096823  
**Lab Number** : 02642261  
**Unique Number** : 5799800  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

**GFL Environmental - 574 - Coquitlam**  
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 Coquitlam, BC  
 CA V3K 6B5  
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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.