



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
401104
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096811	GFL0096845	---
Sample Date		Client Info		08 May 2024	01 Feb 2024	---
Machine Age	hrs	Client Info		44650	44012	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		600	600	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	27	12	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>4	0	<1	---
Titanium	ppm	ASTM D5185(m)		<1	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	5	6	---
Lead	ppm	ASTM D5185(m)	>40	7	2	---
Copper	ppm	ASTM D5185(m)	>330	3	3	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

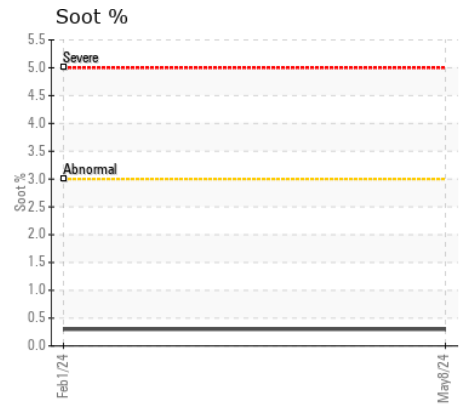
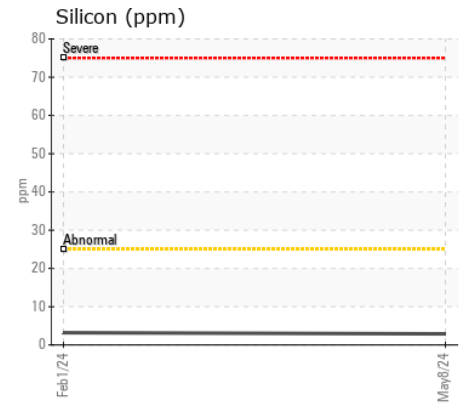
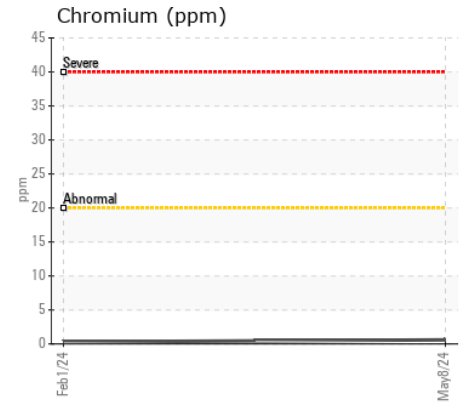
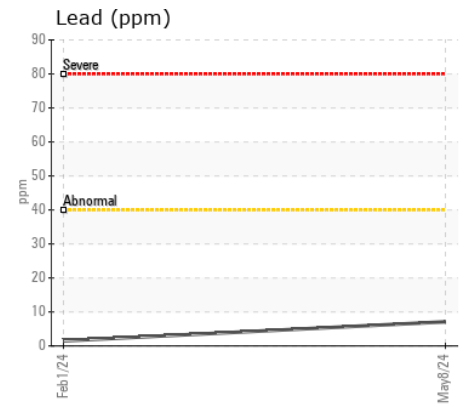
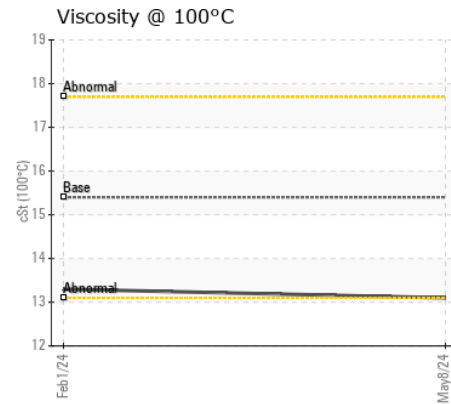
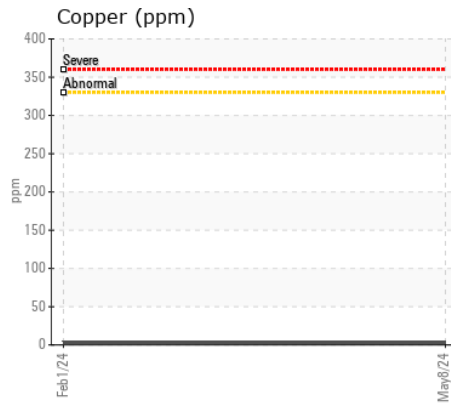
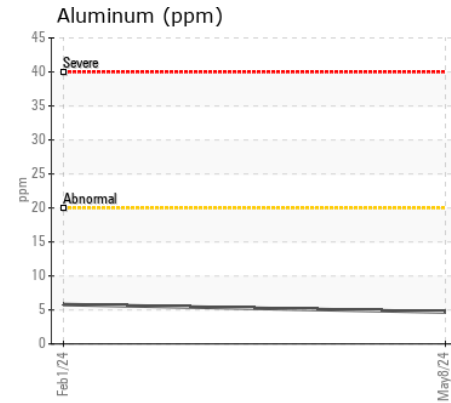
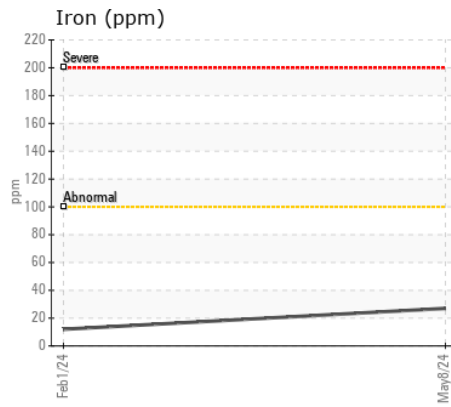
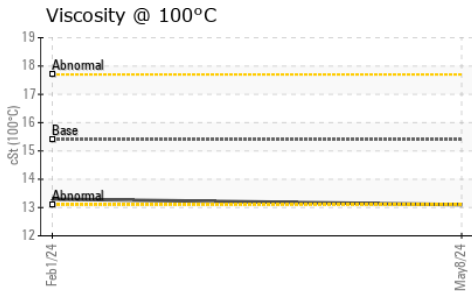
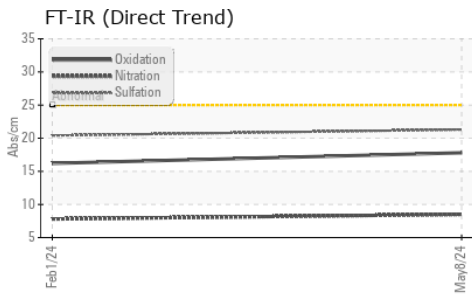
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	3	---
Potassium	ppm	ASTM D5185(m)	>20	9	13	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.3	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	8.5	7.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	20.4	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	3	---
Boron	ppm	ASTM D5185(m)	0	7	4	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	62	60	---
Manganese	ppm	ASTM D5185(m)	0	<1	0	---
Magnesium	ppm	ASTM D5185(m)	1010	978	985	---
Calcium	ppm	ASTM D5185(m)	1070	1161	1100	---
Phosphorus	ppm	ASTM D5185(m)	1150	1022	1044	---
Zinc	ppm	ASTM D5185(m)	1270	1221	1198	---
Sulfur	ppm	ASTM D5185(m)	2060	2523	2763	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.8	16.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.1	13.3	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096811
Lab Number : 02636870
Unique Number : 5786032
Test Package : MOB 1
Received : 22 May 2024
Tested : 22 May 2024
Diagnosed : 22 May 2024 - Wes Davis

GFL Environmental - 574 - Vancouver Fleet
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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.