



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
812089

Component
Diesel Engine

Fluid
PETRO CANADA DURON CLASSIC 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0088351	GFL0088347	---
Sample Date		Client Info		05 Mar 2024	28 Sep 2023	---
Machine Age	hrs	Client Info		2810	2174	---
Oil Age	hrs	Client Info		0	600	---
Filter Age	hrs	Client Info		0	600	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	29	37	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	14	34	---
Lead	ppm	ASTM D5185(m)	>40	<1	0	---
Copper	ppm	ASTM D5185(m)	>330	<1	2	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

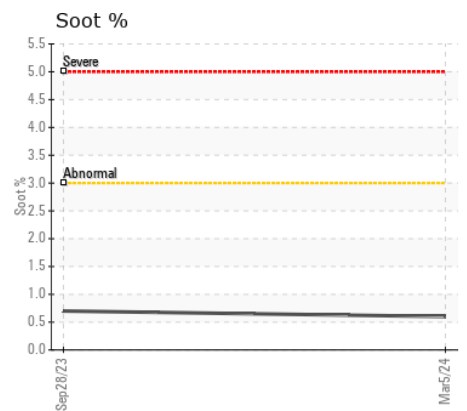
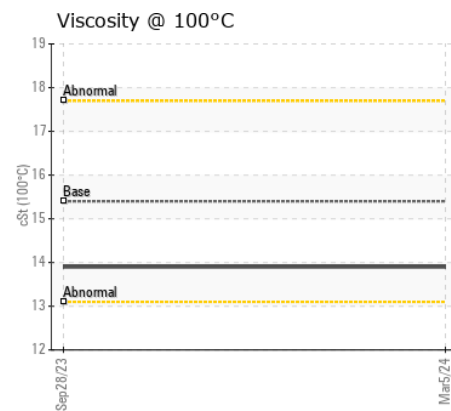
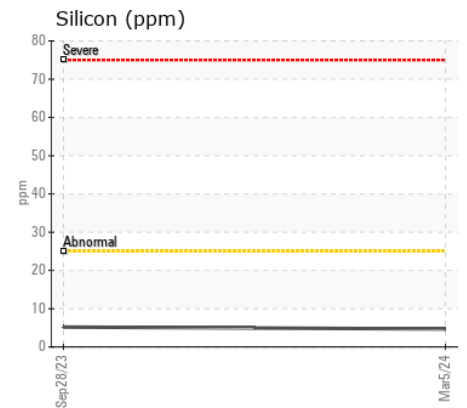
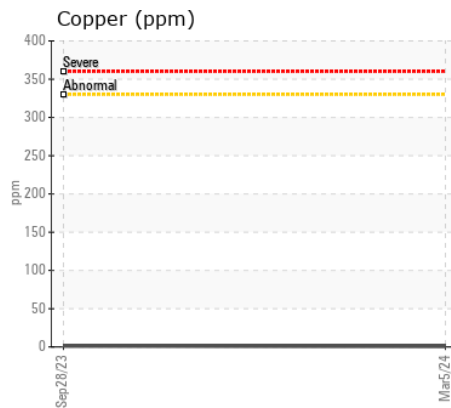
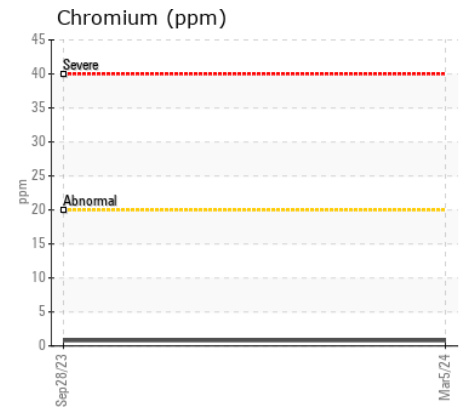
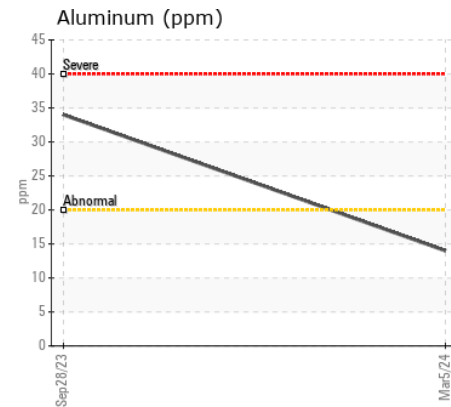
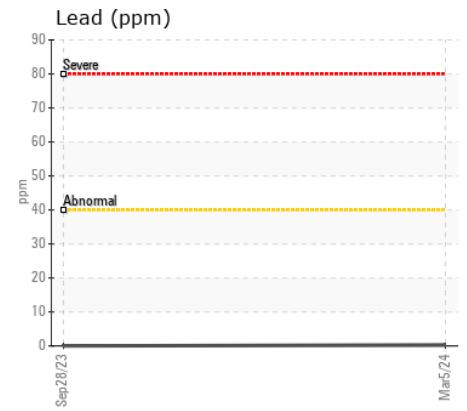
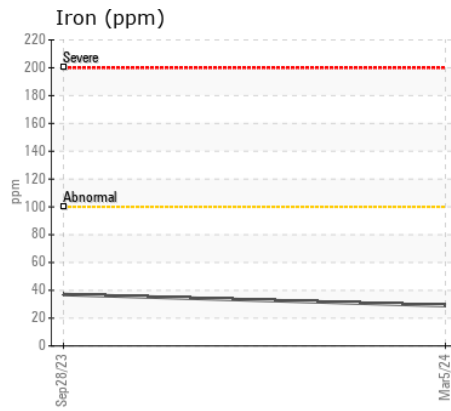
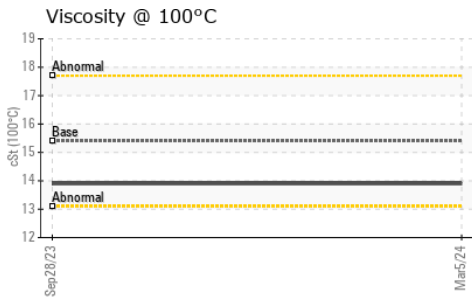
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	5	---
Potassium	ppm	ASTM D5185(m)	>20	23	74	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.6	0.7	---
Nitration	Abs/cm	ASTM D7624*	>20	9.2	9.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	20.8	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	---
Boron	ppm	ASTM D5185(m)	0	1	6	---
Barium	ppm	ASTM D5185(m)	0	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	61	62	---
Manganese	ppm	ASTM D5185(m)	0	0	0	---
Magnesium	ppm	ASTM D5185(m)	15	1001	976	---
Calcium	ppm	ASTM D5185(m)	2540	1099	1092	---
Phosphorus	ppm	ASTM D5185(m)	1000	1024	970	---
Zinc	ppm	ASTM D5185(m)	1100	1211	1218	---
Sulfur	ppm	ASTM D5185(m)	3800	2609	2481	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	16.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	13.9	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0088351 **Received** : 06 Mar 2024
Lab Number : 02620077 **Tested** : 06 Mar 2024
Unique Number : 5737187 **Diagnosed** : 06 Mar 2024 - Wes Davis
Test Package : MOB 1

GFL Environmental - 508
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 North Bay, ON
 CA P1B 2H3
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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.