

Area
[1276120]
Machine Id
114018
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		GFL0118529	GFL0028551	---
Sample Date		Client Info		13 May 2024	06 Mar 2024	---
Machine Age	hrs	Client Info		1086	594	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	16	47	---
Chromium	ppm	ASTM D5185(m)	>20	<1	1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	1	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	3	7	---
Lead	ppm	ASTM D5185(m)	>40	<1	3	---
Copper	ppm	ASTM D5185(m)	>330	5	27	---
Tin	ppm	ASTM D5185(m)	>15	<1	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

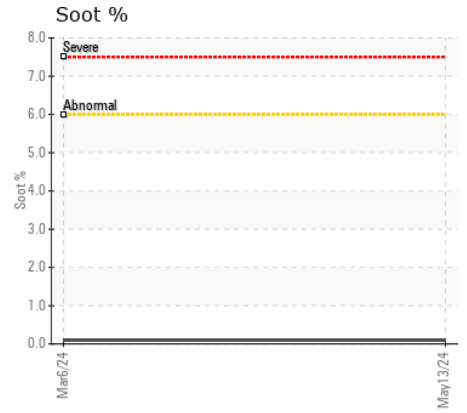
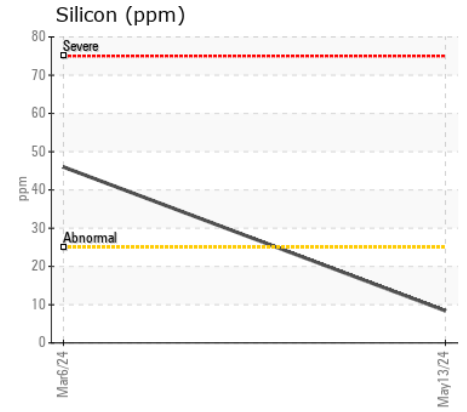
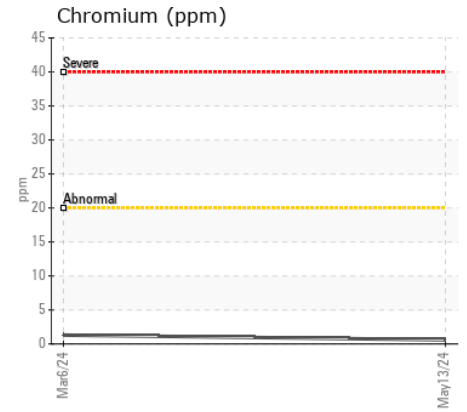
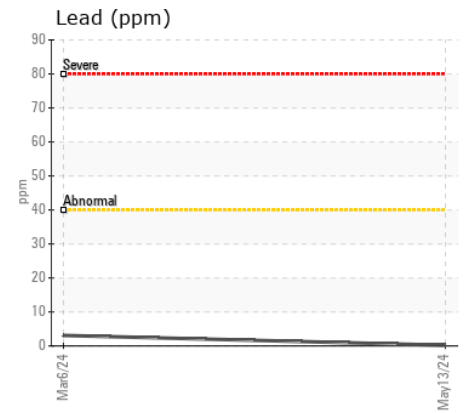
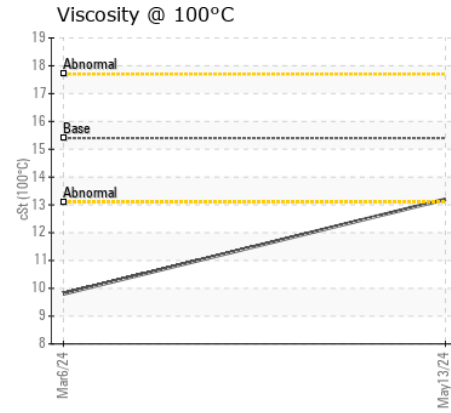
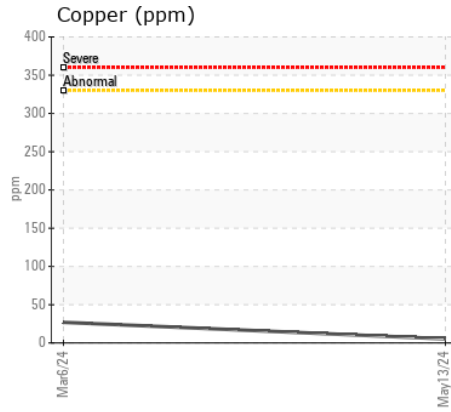
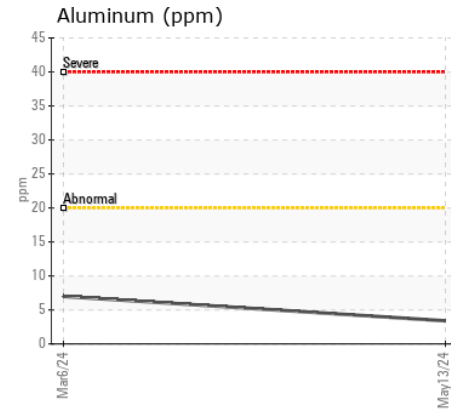
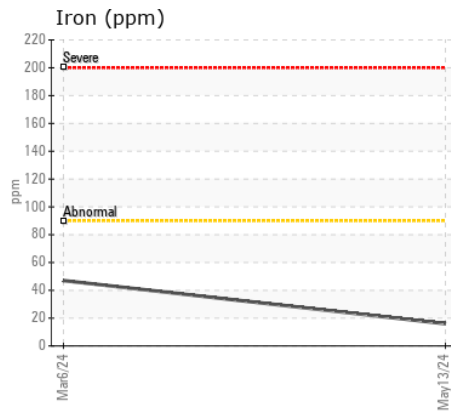
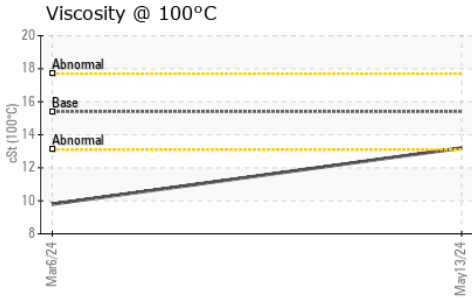
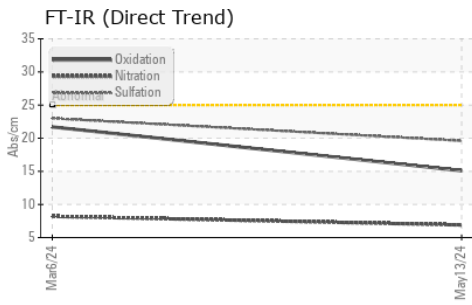
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	46	---
Potassium	ppm	ASTM D5185(m)	>20	9	18	---
Fuel		WC Method	>3.0	<1.0	▲ 1.1	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>6	0.1	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	6.9	8.2	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.6	23.0	---
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	6	---
Boron	ppm	ASTM D5185(m)	0	4	● 39	---
Barium	ppm	ASTM D5185(m)	0	<1	5	---
Molybdenum	ppm	ASTM D5185(m)	60	57	49	---
Manganese	ppm	ASTM D5185(m)	0	<1	5	---
Magnesium	ppm	ASTM D5185(m)	1010	935	● 569	---
Calcium	ppm	ASTM D5185(m)	1070	1073	● 1554	---
Phosphorus	ppm	ASTM D5185(m)	1150	961	● 730	---
Zinc	ppm	ASTM D5185(m)	1270	1145	● 843	---
Sulfur	ppm	ASTM D5185(m)	2060	2382	1984	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.1	21.7	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.2	▲ 9.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118529
Lab Number : 02635578
Unique Number : 5776731
Test Package : MOB 1

GFL Environmental - 207 - Pickering SW
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 PICKERING, ON
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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.