



Machine Id
FREIGHTLINER 223075
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122266	GFL0071124	---
Sample Date		Client Info		27 May 2024	03 Mar 2023	---
Machine Age	hrs	Client Info		9558	7662	---
Oil Age	hrs	Client Info		940	0	---
Filter Age	hrs	Client Info		940	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	28	31	---
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>30	1	2	---
Lead	ppm	ASTM D5185(m)	>30	3	11	---
Copper	ppm	ASTM D5185(m)	>150	<1	2	---
Tin	ppm	ASTM D5185(m)	>5	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

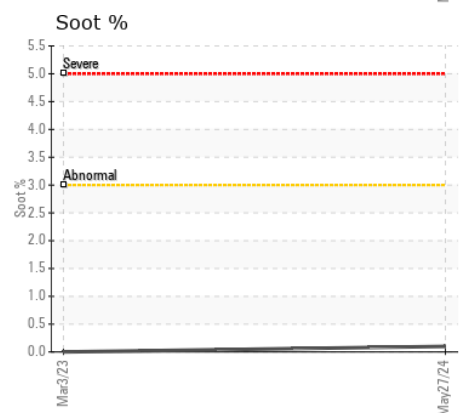
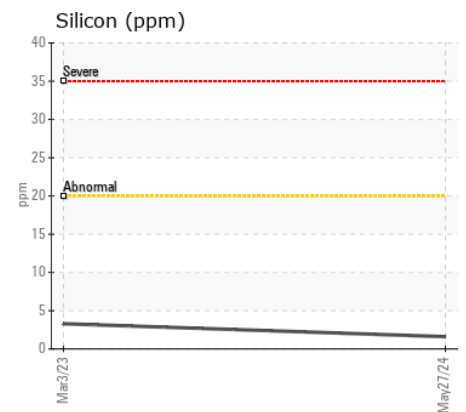
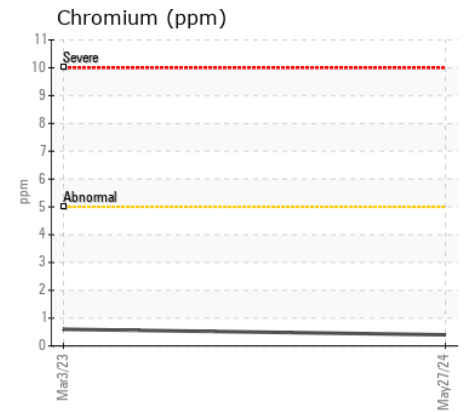
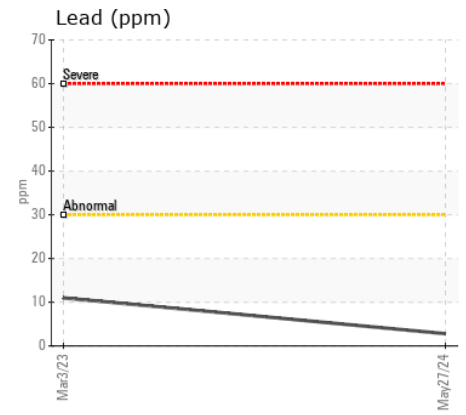
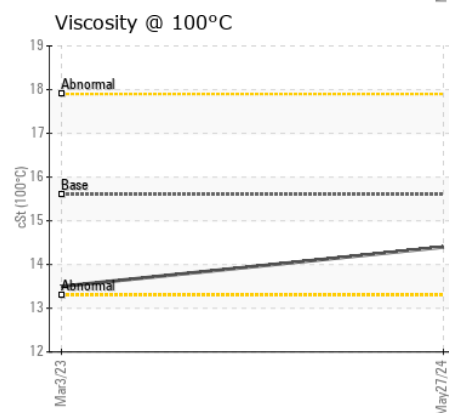
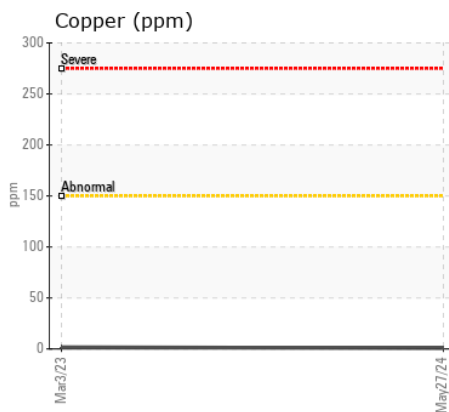
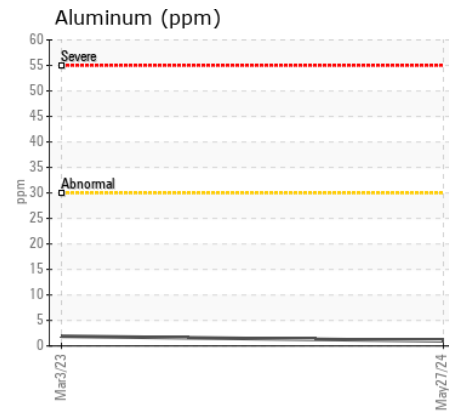
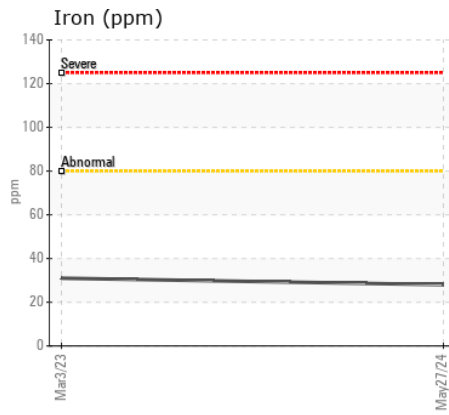
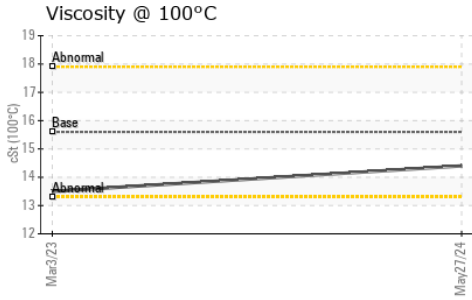
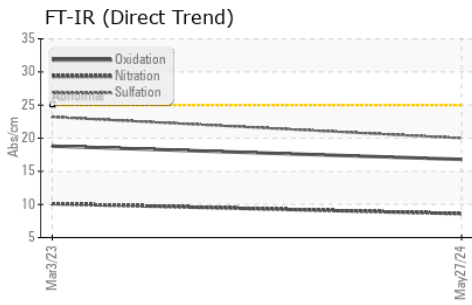
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	3	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.1	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.6	10.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0	23.2	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
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)		1	8	---
Boron	ppm	ASTM D5185(m)	0	6	11	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	61	85	---
Manganese	ppm	ASTM D5185(m)	0	0	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	974	926	---
Calcium	ppm	ASTM D5185(m)	1070	1197	1326	---
Phosphorus	ppm	ASTM D5185(m)	1150	1033	1102	---
Zinc	ppm	ASTM D5185(m)	1270	1255	1264	---
Sulfur	ppm	ASTM D5185(m)	2060	2587	2619	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.8	18.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.4	13.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122266 **Received** : 06 Jun 2024
Lab Number : 02640174 **Tested** : 06 Jun 2024
Unique Number : 5789336 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 987 - Charlottetown
 7 Superior Crescent
 Charlottetown, PE
 CA C1A 7N5
 Contact: Vicki Metcalfe
 vmetcalfe@gflenv.com
 T: (782)377-5918
 F: (506)453-9490

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.