



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
GFL218
Machine Id
231004
Component
Diesel Engine
Fluid
NOT GIVEN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113164	GFL0103086	---
Sample Date		Client Info		27 Feb 2024	21 Nov 2023	---
Machine Age	kms	Client Info		23572	16798	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>80	12	10	---
Chromium	ppm	ASTM D5185(m)	>5	1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>30	2	1	---
Lead	ppm	ASTM D5185(m)	>30	<1	0	---
Copper	ppm	ASTM D5185(m)	>150	<1	1	---
Tin	ppm	ASTM D5185(m)	>5	<1	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

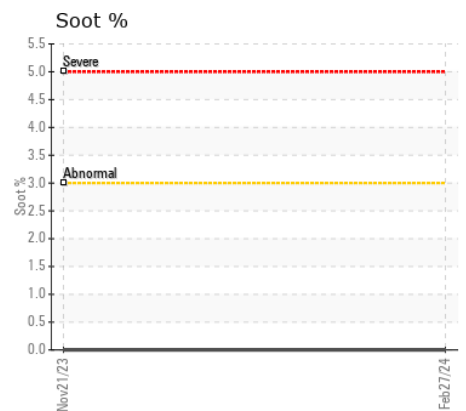
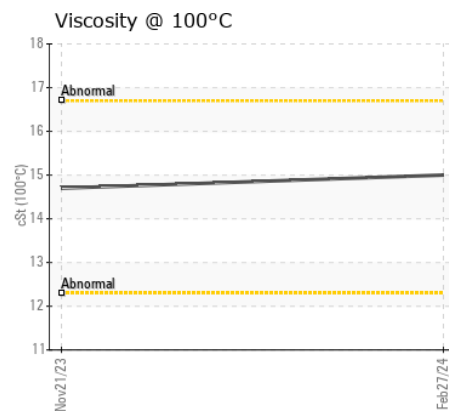
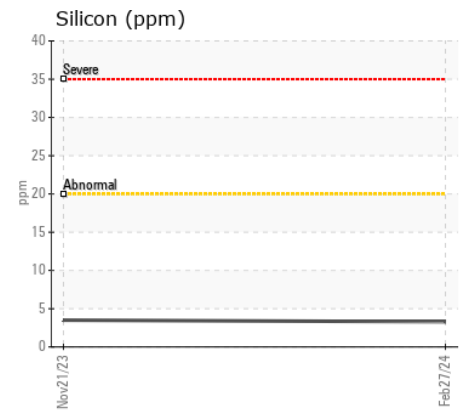
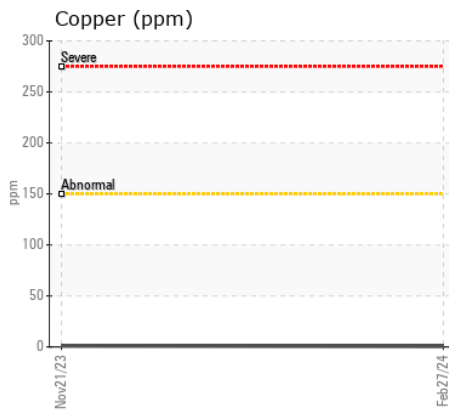
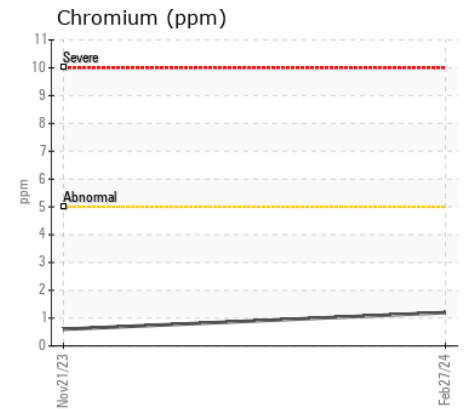
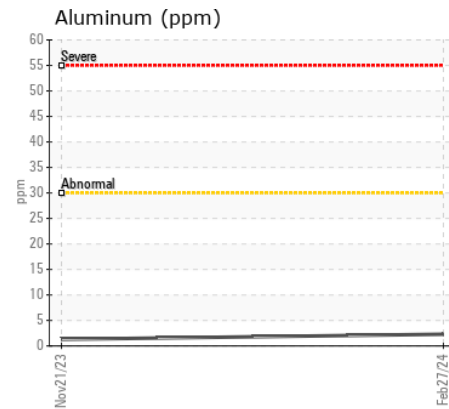
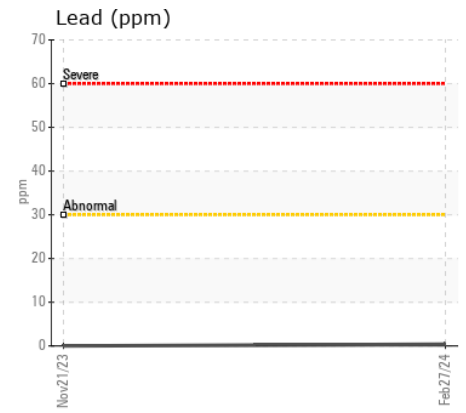
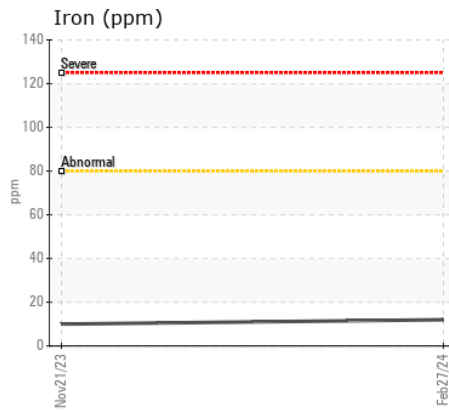
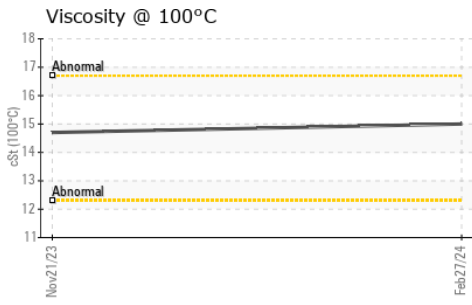
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	3	4	---
Potassium	ppm	ASTM D5185(m)	>20	2	<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	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.8	8.4	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	20.1	---
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)		5	6	---
Boron	ppm	ASTM D5185(m)		20	27	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		57	52	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		713	561	---
Calcium	ppm	ASTM D5185(m)		1608	1612	---
Phosphorus	ppm	ASTM D5185(m)		867	760	---
Zinc	ppm	ASTM D5185(m)		1041	912	---
Sulfur	ppm	ASTM D5185(m)		2306	1974	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.3	16.8	---
Visc @ 100°C	cSt	ASTM D7279(m)		15.0	14.7	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113164
Lab Number : 02618848
Unique Number : 5735958
Test Package : MOB 1
Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
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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.