



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
GFL218
Machine Id
833042
Component
Natural Gas Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113186	GFL0103089	---
Sample Date		Client Info		21 Feb 2024	22 Nov 2023	---
Machine Age	kms	Client Info		9599	5648	---
Oil Age	kms	Client Info		5647	0	---
Filter Age	kms	Client Info		5647	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)	>50	11	36	---
Chromium	ppm	ASTM D5185(m)	>4	<1	0	---
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)	>9	2	4	---
Lead	ppm	ASTM D5185(m)	>30	<1	2	---
Copper	ppm	ASTM D5185(m)	>35	3	16	---
Tin	ppm	ASTM D5185(m)	>4	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

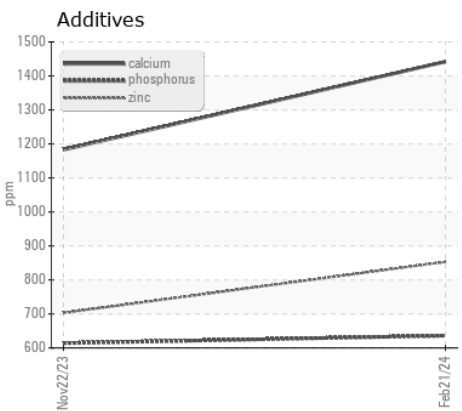
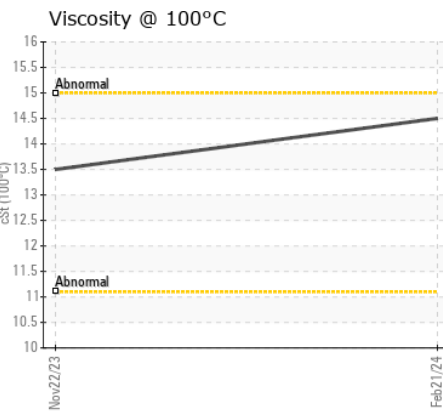
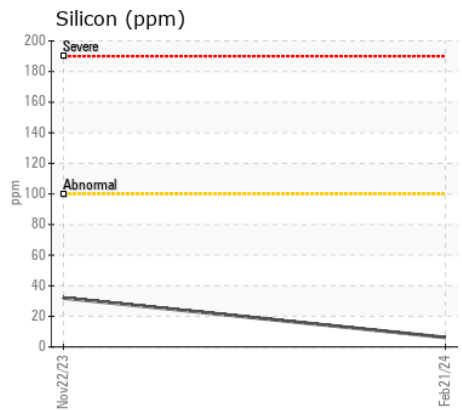
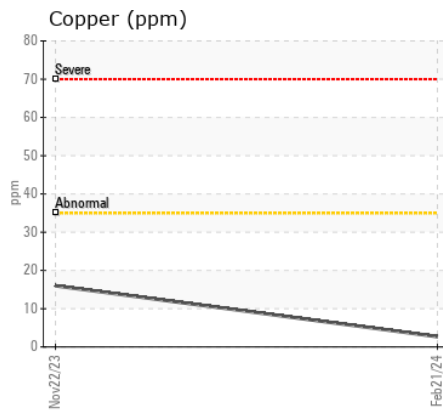
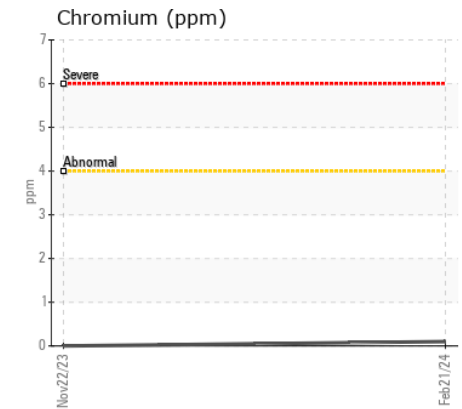
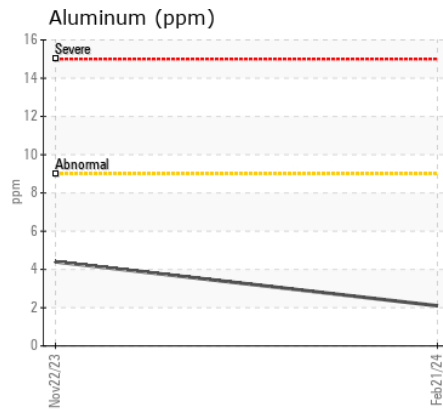
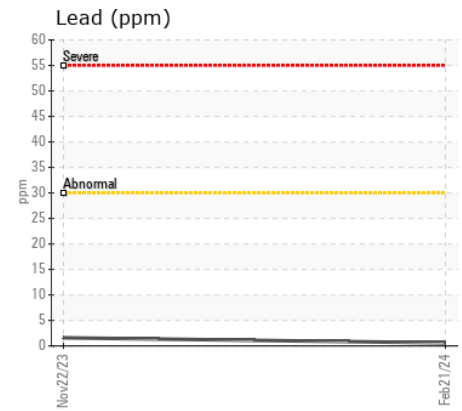
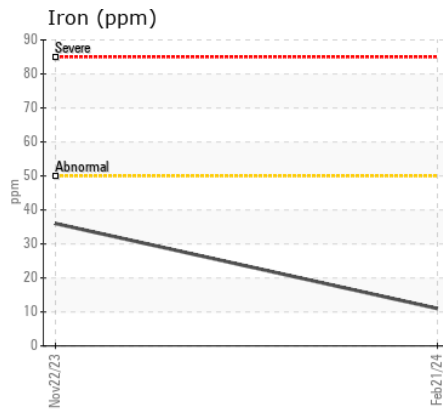
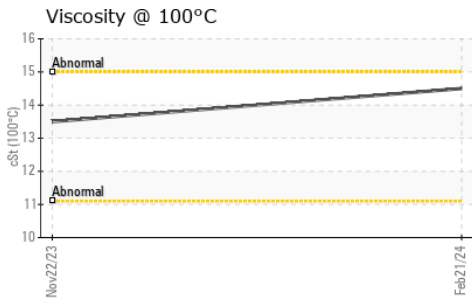
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	6	32	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	10.9	8.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	22.3	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		6	2	---
Boron	ppm	ASTM D5185(m)		8	15	---
Barium	ppm	ASTM D5185(m)		<1	3	---
Molybdenum	ppm	ASTM D5185(m)		52	101	---
Manganese	ppm	ASTM D5185(m)		<1	9	---
Magnesium	ppm	ASTM D5185(m)		543	615	---
Calcium	ppm	ASTM D5185(m)		1442	1183	---
Phosphorus	ppm	ASTM D5185(m)		636	614	---
Zinc	ppm	ASTM D5185(m)		853	703	---
Sulfur	ppm	ASTM D5185(m)		2079	2185	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	16.4	---
Visc @ 100°C	cSt	ASTM D7279(m)		14.5	13.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113186
Lab Number : 02618563
Unique Number : 5735673
Test Package : MOB 1

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)745-8080
 F:

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.