



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931010
Component
Natural Gas Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112688	GFL0094841	---
Sample Date		Client Info		10 Apr 2024	12 Oct 2023	---
Machine Age	kms	Client Info		33568	3797	---
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)	>50	22	39	---
Chromium	ppm	ASTM D5185(m)	>5	2	3	---
Nickel	ppm	ASTM D5185(m)	>4	1	2	---
Titanium	ppm	ASTM D5185(m)	>5	<1	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	5	9	---
Lead	ppm	ASTM D5185(m)	>40	4	4	---
Copper	ppm	ASTM D5185(m)	>150	2	4	---
Tin	ppm	ASTM D5185(m)	>4	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

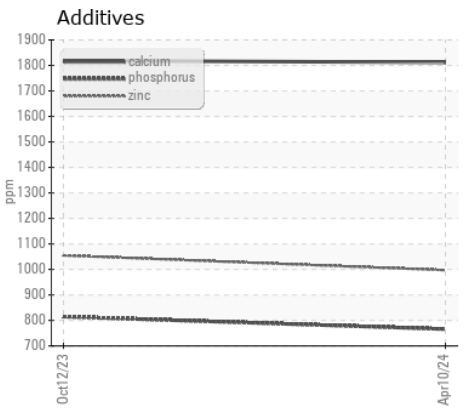
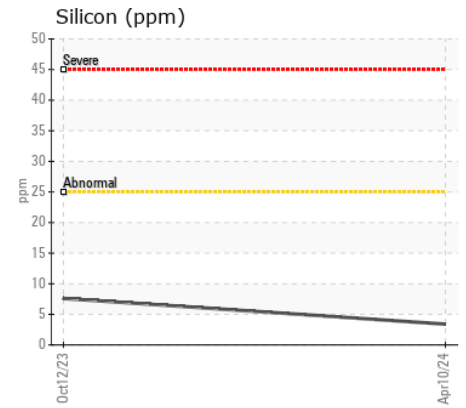
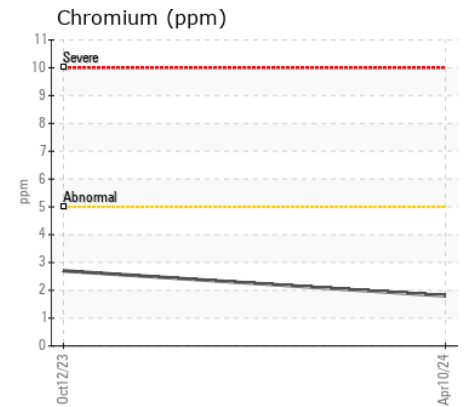
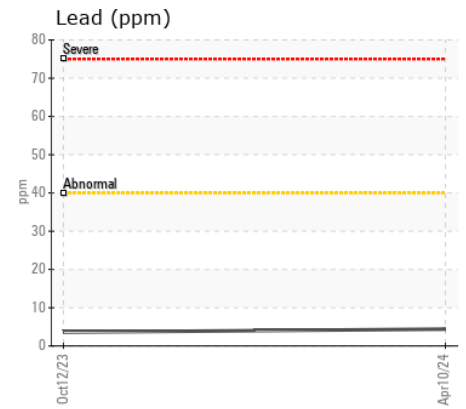
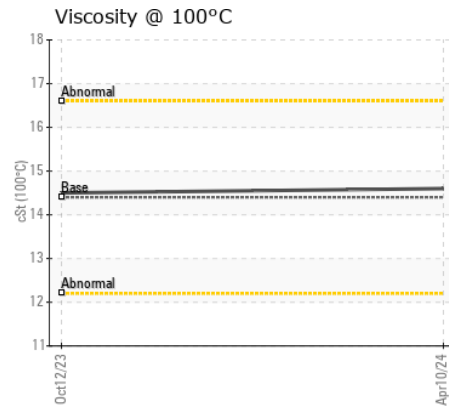
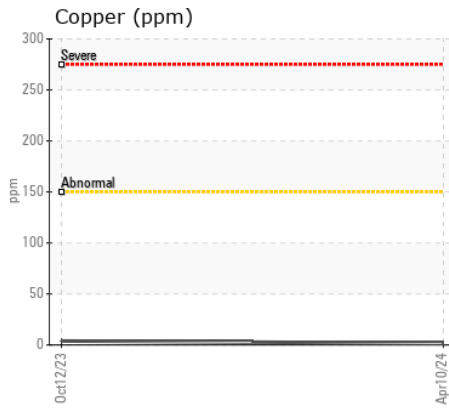
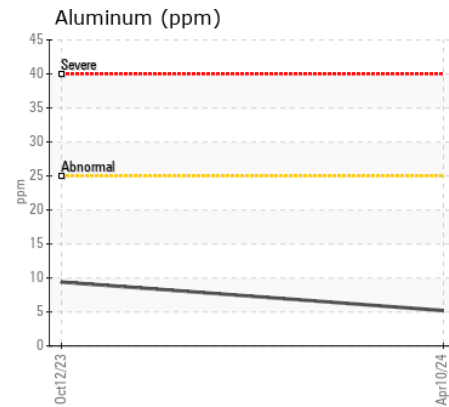
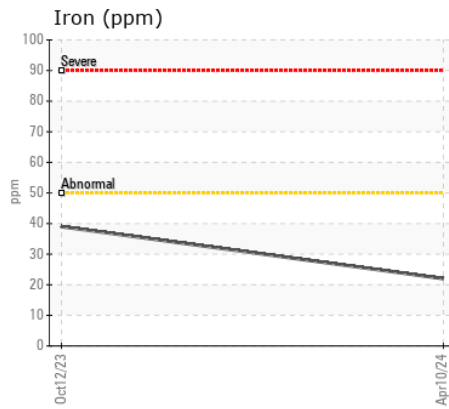
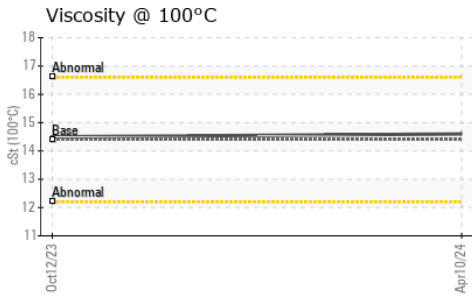
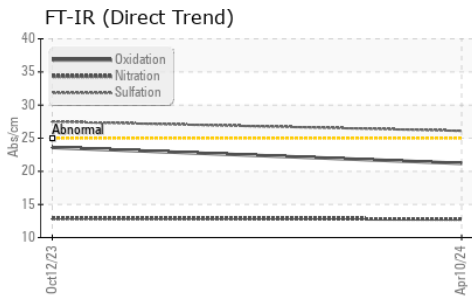
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	8	---
Potassium	ppm	ASTM D5185(m)	>20	10	23	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.8	12.9	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.1	27.5	---
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)	>158	8	10	---
Boron	ppm	ASTM D5185(m)	250	10	8	---
Barium	ppm	ASTM D5185(m)	10	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	59	64	---
Manganese	ppm	ASTM D5185(m)		<1	2	---
Magnesium	ppm	ASTM D5185(m)	450	622	680	---
Calcium	ppm	ASTM D5185(m)	3000	1812	1819	---
Phosphorus	ppm	ASTM D5185(m)	1150	766	815	---
Zinc	ppm	ASTM D5185(m)	1350	997	1055	---
Sulfur	ppm	ASTM D5185(m)	4250	1988	2059	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.2	23.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.6	14.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112688 **Received** : 19 Apr 2024
Lab Number : 02630061 **Tested** : 19 Apr 2024
Unique Number : 5763193 **Diagnosed** : 19 Apr 2024 - Kevin Marson
Test Package : MOB 1

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
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 Contact: Natalia Stalynska
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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.

T:
F: