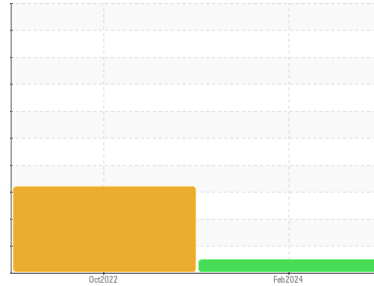




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
931038
 Component
Natural Gas Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0112699	GFL0060153	---
Sample Date	Client Info		27 Feb 2024	11 Oct 2022	---
Machine Age	hrs	Client Info	4771	1184	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	---
Glycol	WC Method		---	0.0	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	19	▲ 86	---
Chromium	ppm	ASTM D5185(m)	>5	1	4	---
Nickel	ppm	ASTM D5185(m)	>4	1	2	---
Titanium	ppm	ASTM D5185(m)	>5	0	20	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	5	● 18	---
Lead	ppm	ASTM D5185(m)	>40	9	4	---
Copper	ppm	ASTM D5185(m)	>150	2	21	---
Tin	ppm	ASTM D5185(m)	>4	1	3	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	11	7	---
Barium	ppm	ASTM D5185(m)	10	0	4	---
Molybdenum	ppm	ASTM D5185(m)	100	57	64	---
Manganese	ppm	ASTM D5185(m)		<1	11	---
Magnesium	ppm	ASTM D5185(m)	450	600	649	---
Calcium	ppm	ASTM D5185(m)	3000	1750	1811	---
Phosphorus	ppm	ASTM D5185(m)	1150	776	873	---
Zinc	ppm	ASTM D5185(m)	1350	980	1019	---
Sulfur	ppm	ASTM D5185(m)	4250	2186	2141	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	▲ 34	---
Sodium	ppm	ASTM D5185(m)	>158	8	12	---
Potassium	ppm	ASTM D5185(m)	>20	3	14	---

INFRA-RED

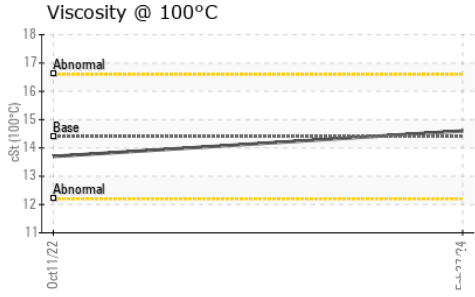
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.7	12.4	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.8	29.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.6	24.5	---



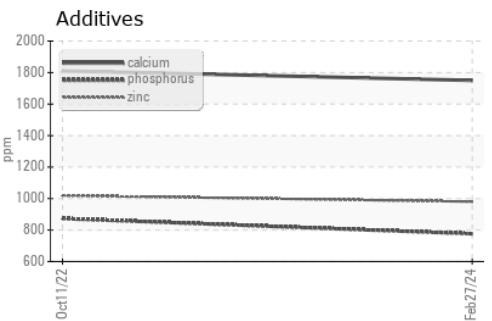
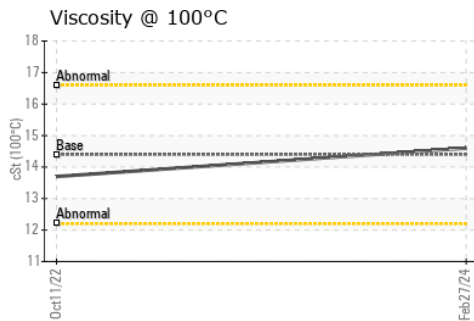
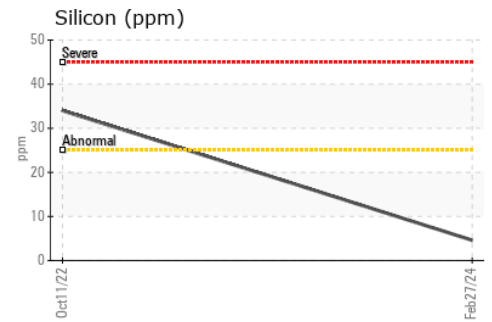
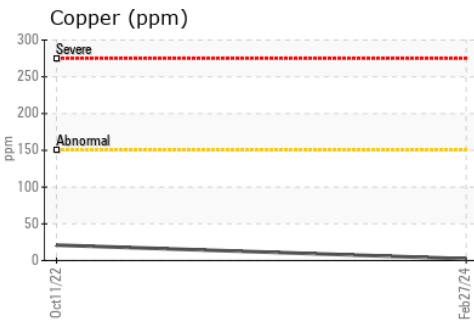
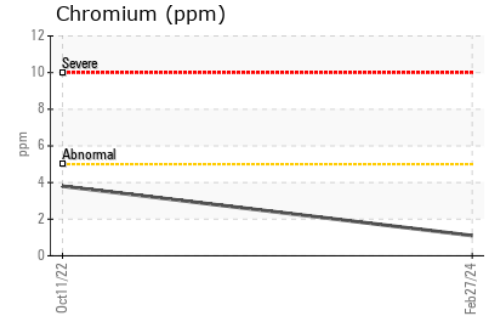
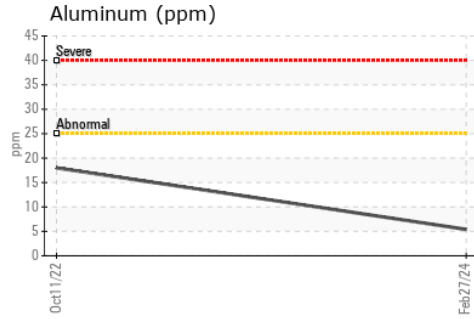
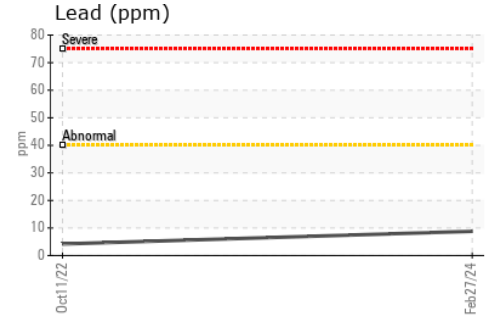
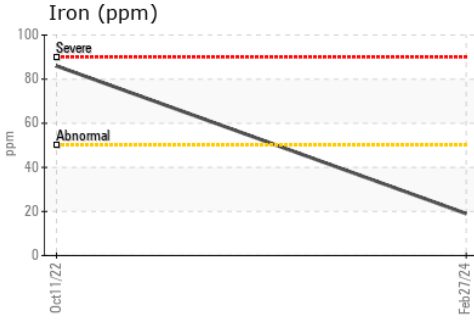
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.6	13.7	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112699
Lab Number : 02621682
Unique Number : 5746801
Test Package : MOB 1
Received : 13 Mar 2024
Tested : 13 Mar 2024
Diagnosed : 13 Mar 2024 - Wes Davis

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9
 Contact: Natalia Stalynska
 nstalynska@gflenv.com

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.