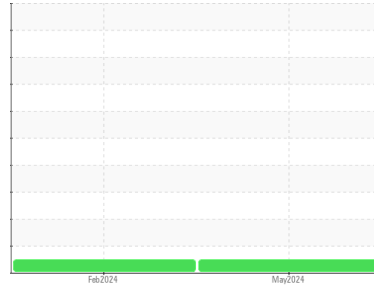




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

212034

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- 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		GFL0118559	GFL0107876	---
Sample Date	Client Info		14 May 2024	29 Feb 2024	---
Machine Age	kms	Client Info	711705	0	---
Oil Age	kms	Client Info	0	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	19	23	---
Chromium	ppm	ASTM D5185(m) >20	<1	<1	---
Nickel	ppm	ASTM D5185(m) >4	0	<1	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m) >3	0	0	---
Aluminum	ppm	ASTM D5185(m) >20	1	2	---
Lead	ppm	ASTM D5185(m) >40	3	4	---
Copper	ppm	ASTM D5185(m) >330	134	154	---
Tin	ppm	ASTM D5185(m) >15	<1	<1	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
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	6	4	---
Barium	ppm	ASTM D5185(m) 10	0	0	---
Molybdenum	ppm	ASTM D5185(m) 100	58	59	---
Manganese	ppm	ASTM D5185(m)	<1	0	---
Magnesium	ppm	ASTM D5185(m) 450	938	954	---
Calcium	ppm	ASTM D5185(m) 3000	1038	1062	---
Phosphorus	ppm	ASTM D5185(m) 1150	943	994	---
Zinc	ppm	ASTM D5185(m) 1350	1142	1170	---
Sulfur	ppm	ASTM D5185(m) 4250	2332	2545	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

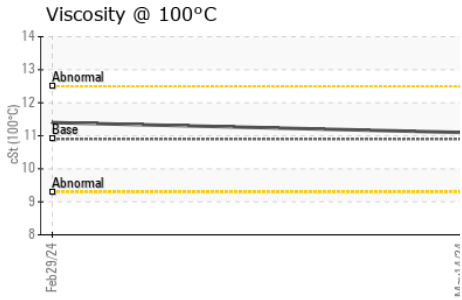
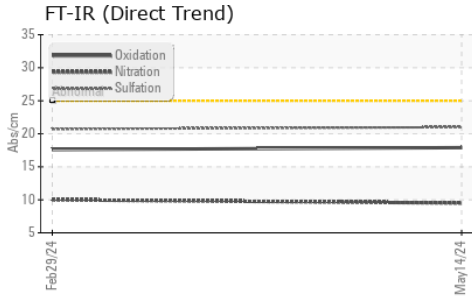
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	5	---
Sodium	ppm	ASTM D5185(m)	2	1	---
Potassium	ppm	ASTM D5185(m) >20	1	<1	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.3	0.4	---
Nitration	Abs/cm	ASTM D7624* >20	9.5	10.0	---
Sulfation	Abs./1mm	ASTM D7415* >30	21.0	20.7	---



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	17.9	17.6

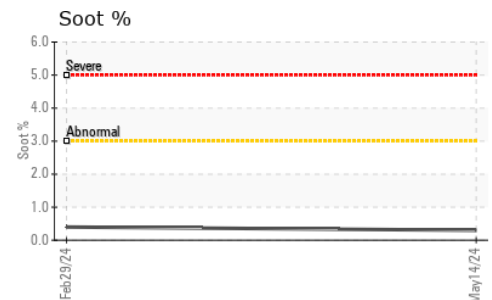
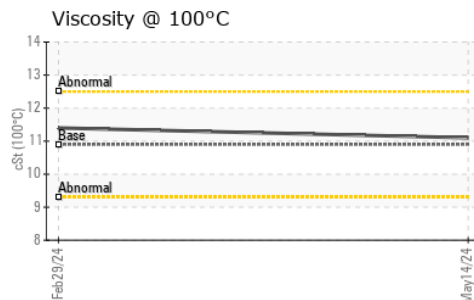
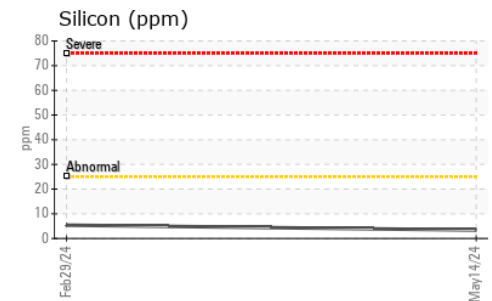
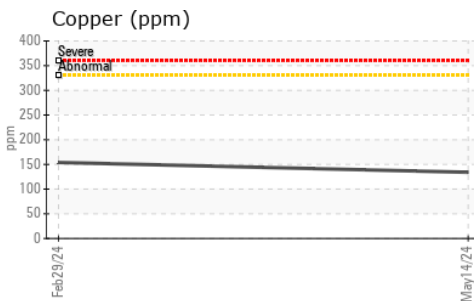
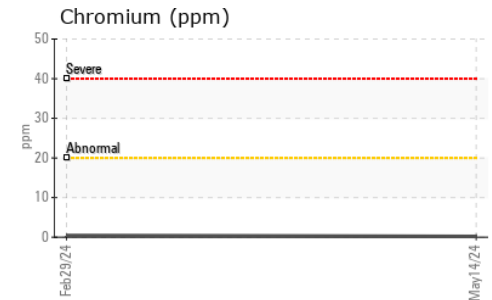
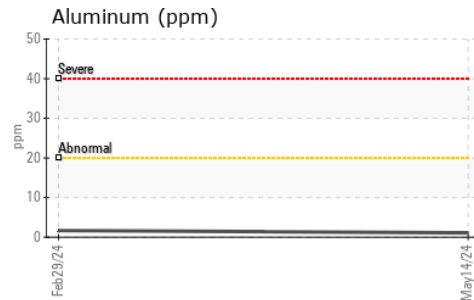
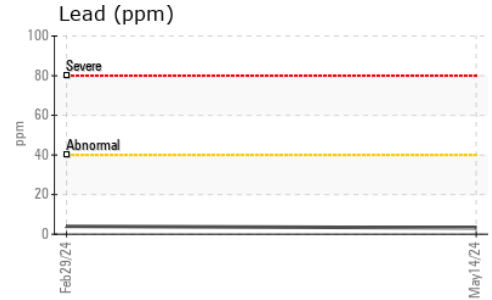
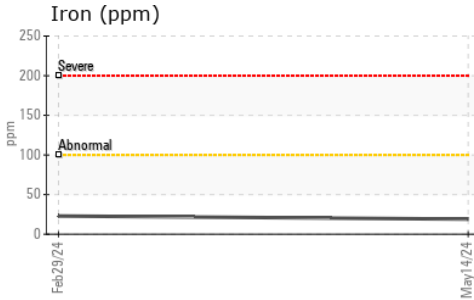
VISUAL

	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.1	11.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118559
Lab Number : 02639575
Unique Number : 5788737
Test Package : MOB 1

GFL Environmental - 310 - Winnipeg
 #360 – 555 Hervo Street,
 Winnipeg, MB
 CA R3T 3L6
 Contact: Joshua Lourenco
 jlourenco@gflenv.com
 T: (204)987-9600
 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.