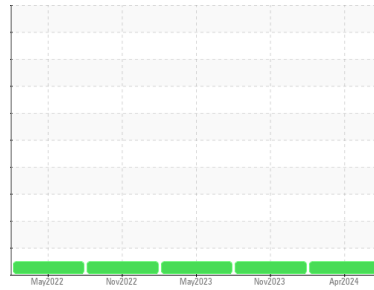




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
931033
 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		GFL0112703	GFL0100358	GFL0079541
Sample Date	Client Info		23 Apr 2024	15 Nov 2023	03 May 2023
Machine Age	hrs	Client Info	5869	4687	45570
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	21	21	24
Chromium	ppm	ASTM D5185(m)	>5	1	2	2
Nickel	ppm	ASTM D5185(m)	>4	1	1	1
Titanium	ppm	ASTM D5185(m)	>5	0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	5	4	6
Lead	ppm	ASTM D5185(m)	>40	5	11	8
Copper	ppm	ASTM D5185(m)	>150	1	1	2
Tin	ppm	ASTM D5185(m)	>4	<1	1	1
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	13	15	10
Barium	ppm	ASTM D5185(m)	10	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	63	62	63
Manganese	ppm	ASTM D5185(m)		<1	<1	1
Magnesium	ppm	ASTM D5185(m)	450	646	678	687
Calcium	ppm	ASTM D5185(m)	3000	1911	1857	1938
Phosphorus	ppm	ASTM D5185(m)	1150	783	852	916
Zinc	ppm	ASTM D5185(m)	1350	1038	1089	1093
Sulfur	ppm	ASTM D5185(m)	4250	2101	2112	2176
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	5	6
Sodium	ppm	ASTM D5185(m)	>158	8	9	10
Potassium	ppm	ASTM D5185(m)	>20	6	3	5

INFRA-RED

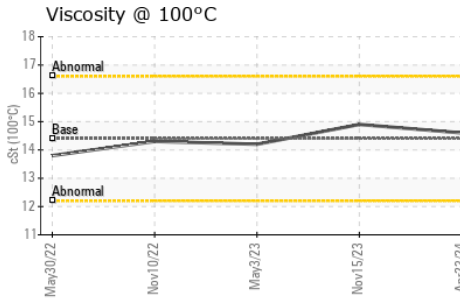
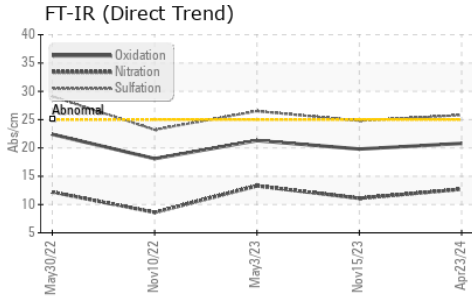
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.7	11.1	13.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.8	24.8	26.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.8	19.8	21.3



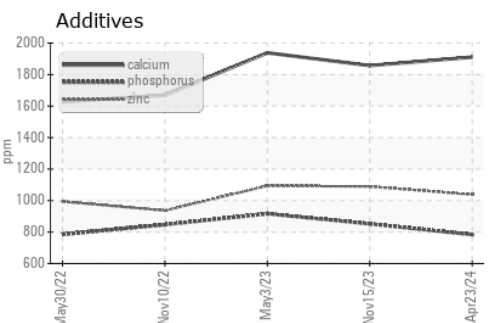
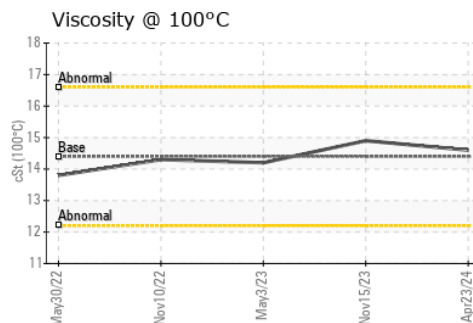
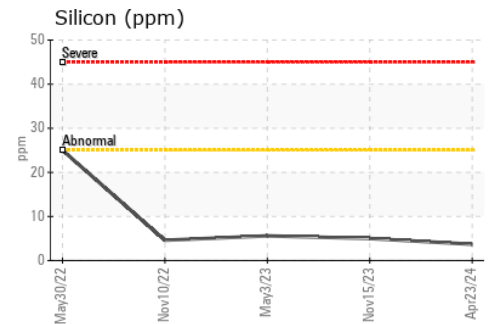
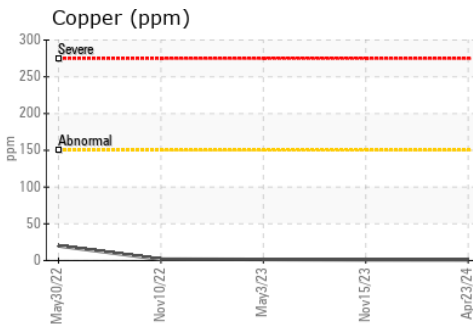
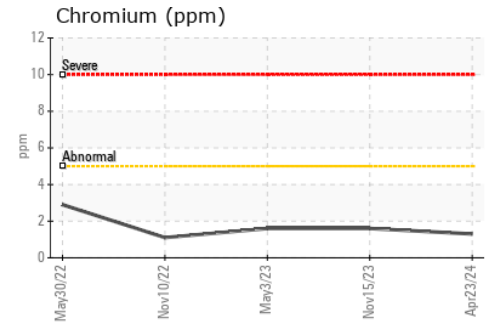
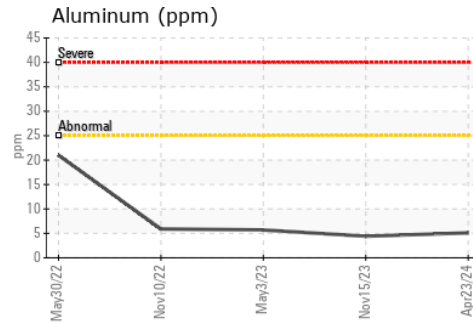
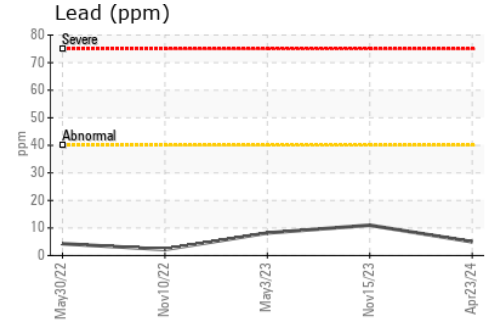
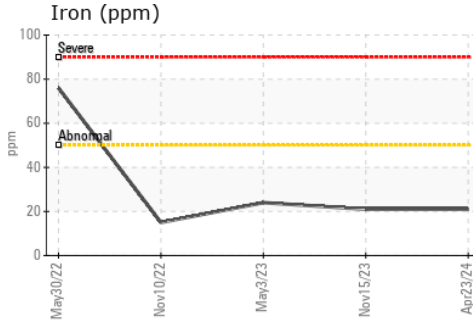
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.6	14.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112703
Lab Number : 02633990
Unique Number : 5775143
Test Package : MOB 1

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.