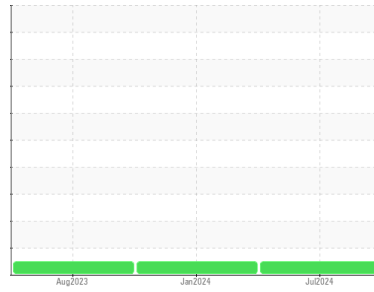




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
931014
 Component
Natural Gas Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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		GFL0119245	GFL0102921	GFL0087027
Sample Date	Client Info		04 Jul 2024	22 Jan 2024	14 Aug 2023
Machine Age	kms	Client Info	47891	3588	2406
Oil Age	kms	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	17	20	28
Chromium	ppm	ASTM D5185(m)	>5	1	1	1
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	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	3	4	5
Lead	ppm	ASTM D5185(m)	>40	18	9	5
Copper	ppm	ASTM D5185(m)	>150	2	2	3
Tin	ppm	ASTM D5185(m)	>4	1	<1	1
Antimony	ppm	ASTM D5185(m)		0	0	0
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	7	8	14
Barium	ppm	ASTM D5185(m)	10	<1	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	58	55	56
Manganese	ppm	ASTM D5185(m)		<1	<1	2
Magnesium	ppm	ASTM D5185(m)	450	615	585	619
Calcium	ppm	ASTM D5185(m)	3000	1815	1748	1687
Phosphorus	ppm	ASTM D5185(m)	1150	741	735	793
Zinc	ppm	ASTM D5185(m)	1350	975	958	1000
Sulfur	ppm	ASTM D5185(m)	4250	2060	2126	2020
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	10	9	10
Potassium	ppm	ASTM D5185(m)	>20	4	7	14

INFRA-RED

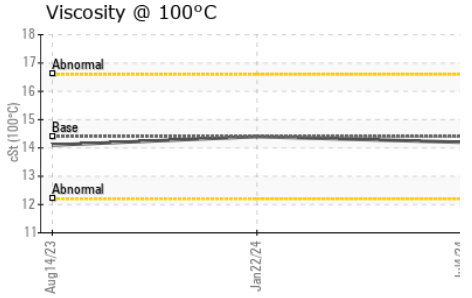
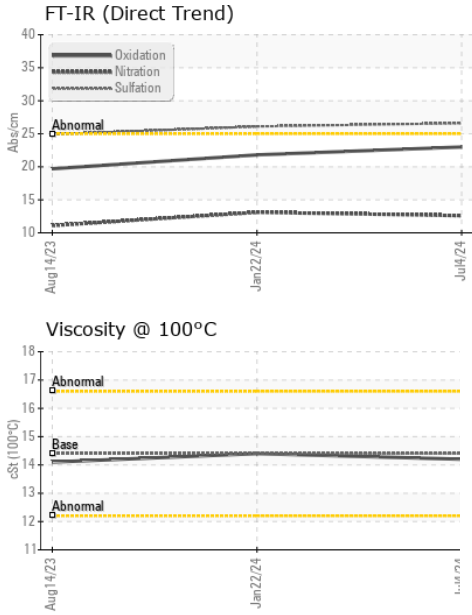
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.6	13.1	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.6	26.1	24.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.0	21.8	19.7



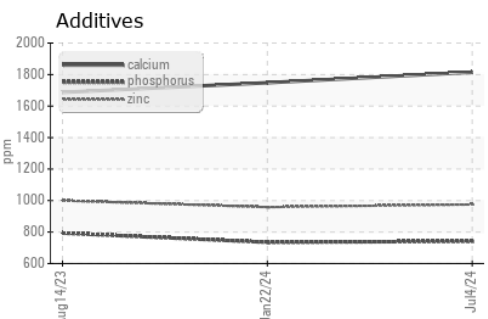
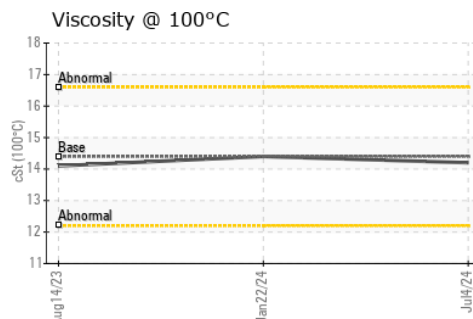
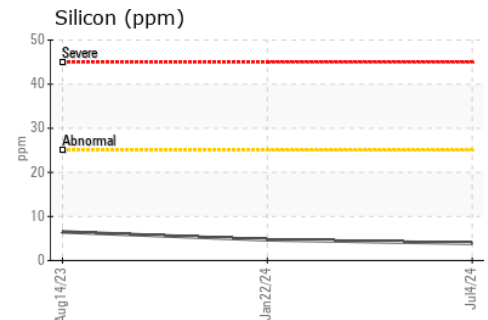
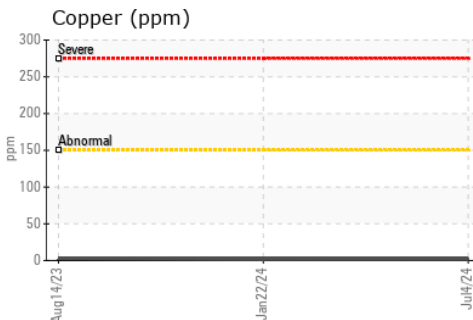
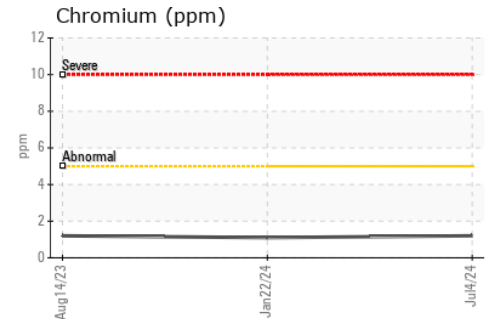
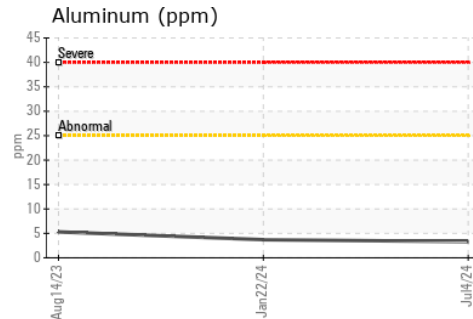
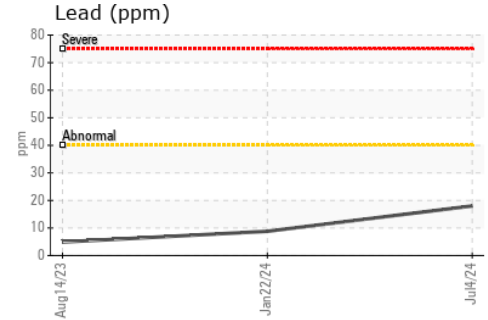
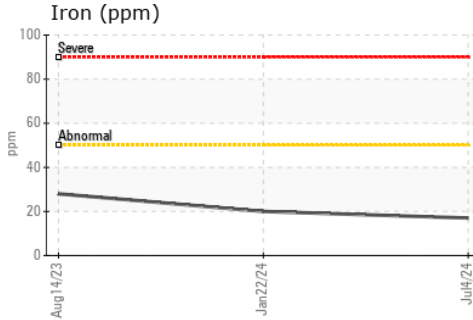
OIL ANALYSIS REPORT



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	14.2	14.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119245
Lab Number : 02646848
Unique Number : 5812400
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.