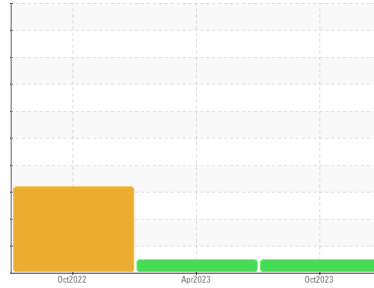




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
GFL253
Machine Id
931035
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		GFL0094838	GFL0079544	GFL0060154
Sample Date	Client Info		11 Oct 2023	04 Apr 2023	11 Oct 2022
Machine Age	kms	Client Info	49367	2320	1175
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	29	33	▲ 71
Chromium	ppm	ASTM D5185(m) >5	2	2	3
Nickel	ppm	ASTM D5185(m) >4	2	2	2
Titanium	ppm	ASTM D5185(m) >5	0	2	21
Silver	ppm	ASTM D5185(m) >3	<1	0	<1
Aluminum	ppm	ASTM D5185(m) >25	17	17	▲ 15
Lead	ppm	ASTM D5185(m) >40	13	2	4
Copper	ppm	ASTM D5185(m) >150	2	3	19
Tin	ppm	ASTM D5185(m) >4	2	2	3
Antimony	ppm	ASTM D5185(m)	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	<1
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	10	8	7
Barium	ppm	ASTM D5185(m) 10	<1	0	4
Molybdenum	ppm	ASTM D5185(m) 100	62	59	61
Manganese	ppm	ASTM D5185(m)	1	2	10
Magnesium	ppm	ASTM D5185(m) 450	675	599	597
Calcium	ppm	ASTM D5185(m) 3000	1805	1810	1684
Phosphorus	ppm	ASTM D5185(m) 1150	830	823	837
Zinc	ppm	ASTM D5185(m) 1350	1049	976	964
Sulfur	ppm	ASTM D5185(m) 4250	2047	2090	2056
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	7	7	▲ 29
Sodium	ppm	ASTM D5185(m) >158	11	10	8
Potassium	ppm	ASTM D5185(m) >20	18	23	12
Glycol	%	ASTM D7922*	0.0	---	0.0

INFRA-RED

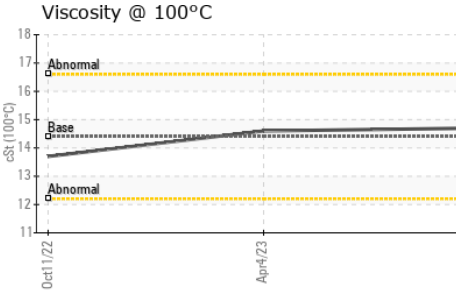
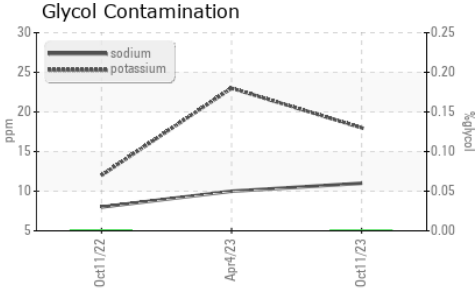
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.1	28.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.3	24.7



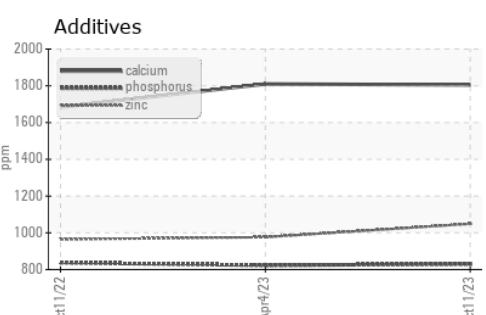
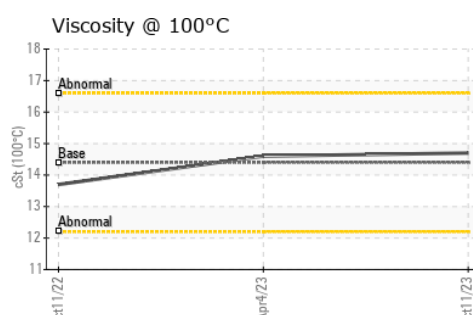
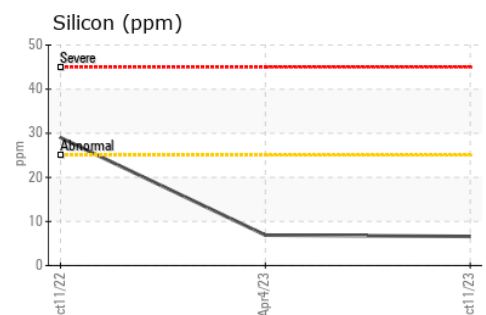
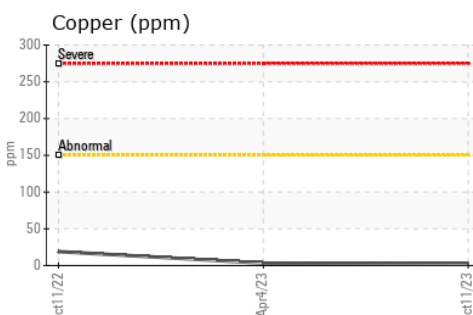
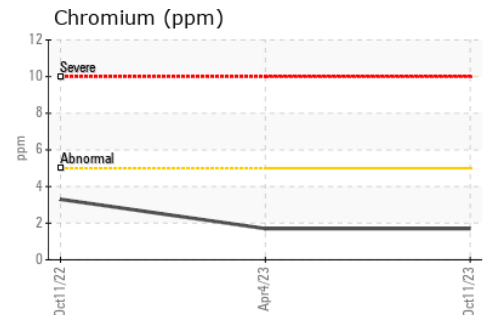
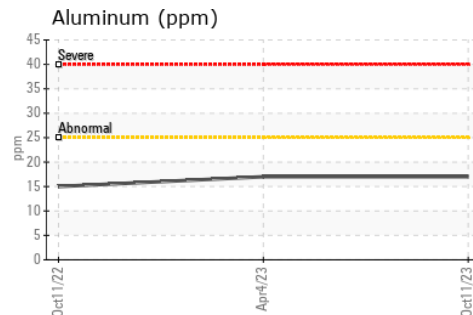
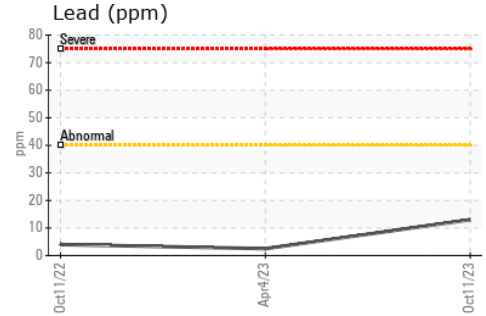
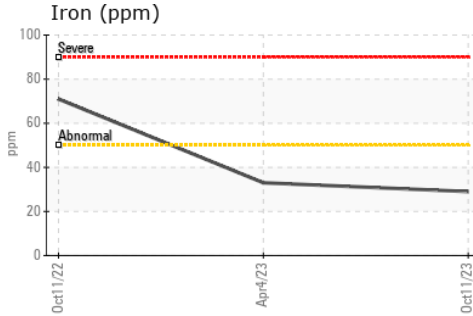
OIL ANALYSIS REPORT



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	14.7	14.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094838 **Received** : 16 Nov 2023
Lab Number : 02596741 **Diagnosed** : 16 Nov 2023
Unique Number : 5681821 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 216
 15 Bermondsey Road
 Toronto, ON
 CA M4B 1Y9
 Contact: Tom Hatzioannidis
 thatzioannidis@gflenv.com
 T: (416)678-9340
 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.