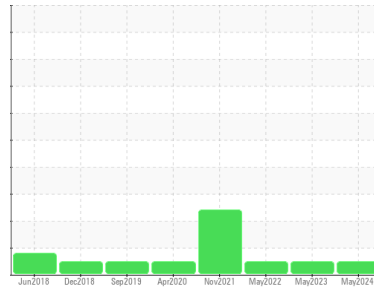




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
9153
 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		GFL0112694	GFL0079553	GFL0053125
Sample Date	Client Info		15 May 2024	24 May 2023	27 May 2022
Machine Age	hrs	Client Info	15611	190307	96331
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	Changed
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	32	40	32
Chromium	ppm	ASTM D5185(m)	>5	1	1	3
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)	>5	0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	10	10	10
Lead	ppm	ASTM D5185(m)	>40	2	4	4
Copper	ppm	ASTM D5185(m)	>150	1	4	6
Tin	ppm	ASTM D5185(m)	>4	<1	2	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<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	9	7	6
Barium	ppm	ASTM D5185(m)	10	<1	2	<1
Molybdenum	ppm	ASTM D5185(m)	100	64	113	57
Manganese	ppm	ASTM D5185(m)		1	3	<1
Magnesium	ppm	ASTM D5185(m)	450	593	131	663
Calcium	ppm	ASTM D5185(m)	3000	1702	1865	1581
Phosphorus	ppm	ASTM D5185(m)	1150	780	788	784
Zinc	ppm	ASTM D5185(m)	1350	954	748	985
Sulfur	ppm	ASTM D5185(m)	4250	2013	2436	2069
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	7	17	6
Sodium	ppm	ASTM D5185(m)	>158	9	6	10
Potassium	ppm	ASTM D5185(m)	>20	1	1	1

INFRA-RED

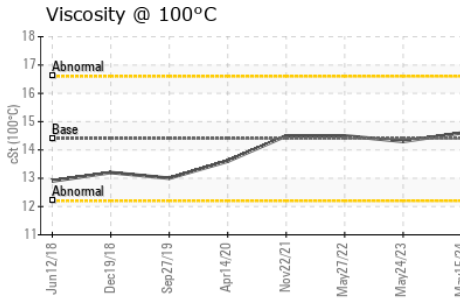
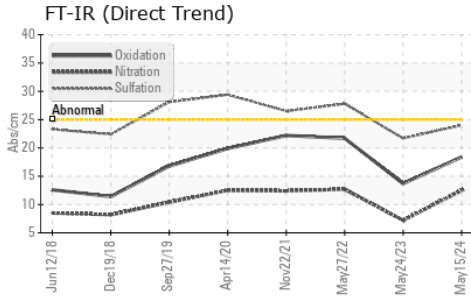
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.5	7.2	12.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.0	21.7	27.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	13.7	21.7



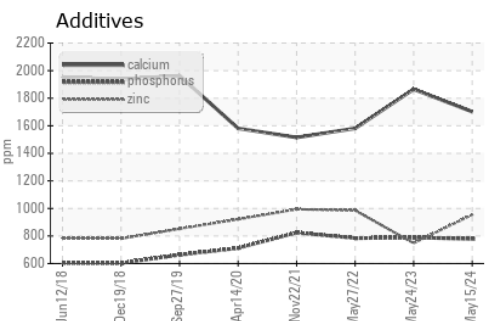
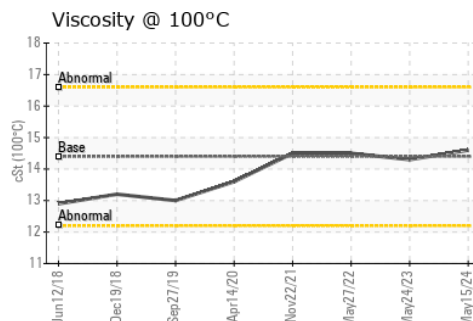
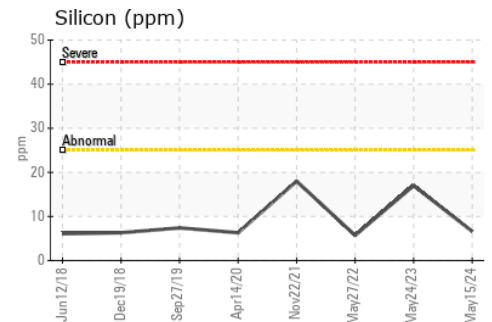
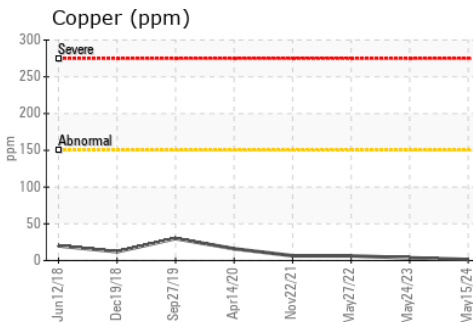
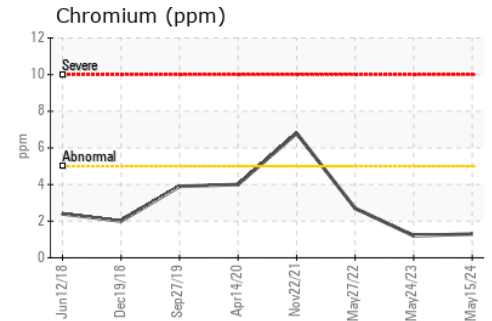
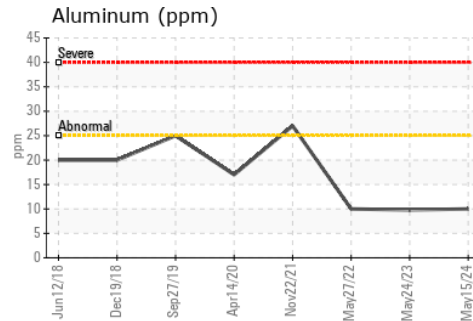
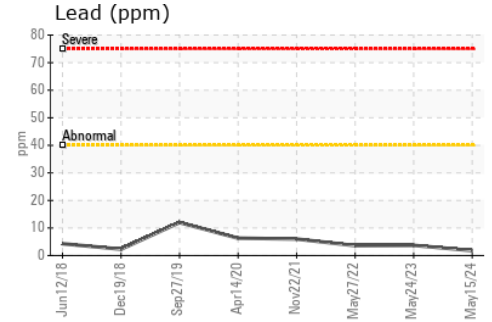
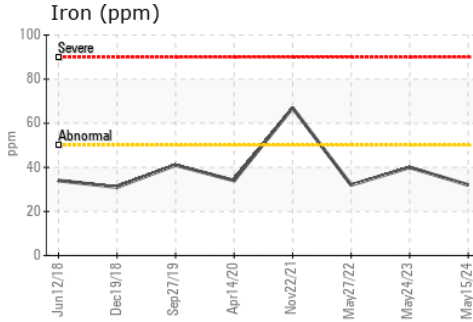
OIL ANALYSIS REPORT



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	14.6	14.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112694
Lab Number : 02637608
Unique Number : 5786770
Test Package : MOB 1

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)550-3869
 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.