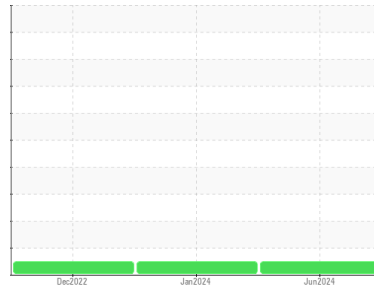




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
931039
 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

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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		GFL0119237	GFL0102923	GFL0066639
Sample Date	Client Info		21 Jun 2024	24 Jan 2024	19 Dec 2022
Machine Age	hrs	Client Info	4442	3595	14635
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	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	21	41	87
Chromium	ppm	ASTM D5185(m)	>5	2	3	5
Nickel	ppm	ASTM D5185(m)	>4	<1	2	2
Titanium	ppm	ASTM D5185(m)	>5	0	0	19
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	17	33	40
Lead	ppm	ASTM D5185(m)	>40	2	8	3
Copper	ppm	ASTM D5185(m)	>150	1	3	18
Tin	ppm	ASTM D5185(m)	>4	<1	1	2
Antimony	ppm	ASTM D5185(m)		0	0	0
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	7	6	5
Barium	ppm	ASTM D5185(m)	10	<1	0	4
Molybdenum	ppm	ASTM D5185(m)	100	53	56	56
Manganese	ppm	ASTM D5185(m)		<1	1	11
Magnesium	ppm	ASTM D5185(m)	450	543	595	564
Calcium	ppm	ASTM D5185(m)	3000	1609	1773	1592
Phosphorus	ppm	ASTM D5185(m)	1150	654	758	782
Zinc	ppm	ASTM D5185(m)	1350	882	967	891
Sulfur	ppm	ASTM D5185(m)	4250	1972	2140	2044
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	7	33
Sodium	ppm	ASTM D5185(m)	>158	8	10	8
Potassium	ppm	ASTM D5185(m)	>20	22	56	111

INFRA-RED

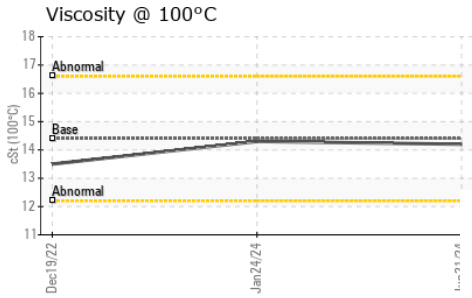
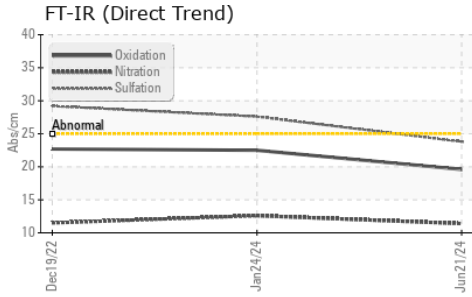
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.4	12.6	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	27.6	29.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.6	22.5	22.7



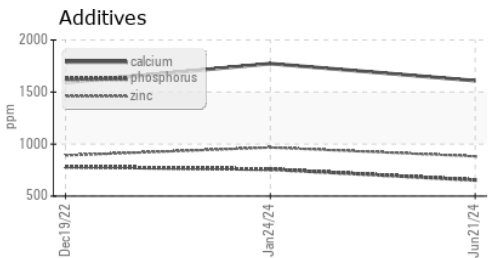
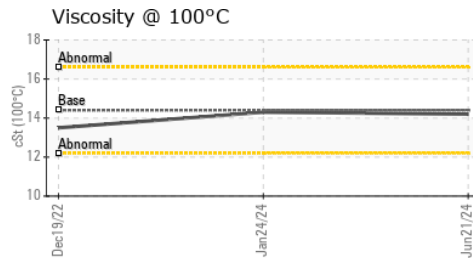
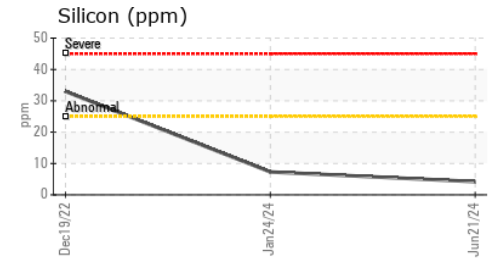
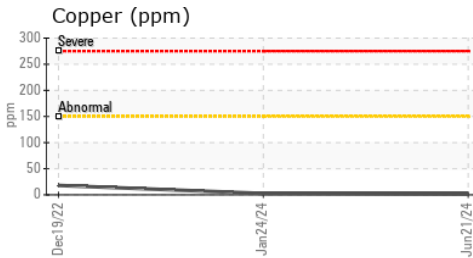
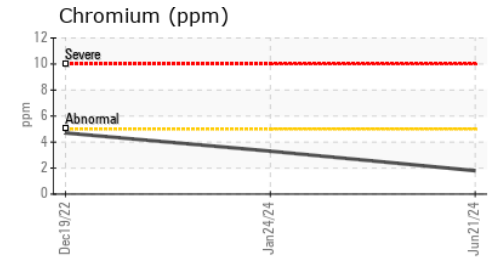
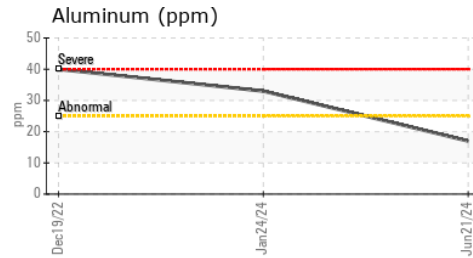
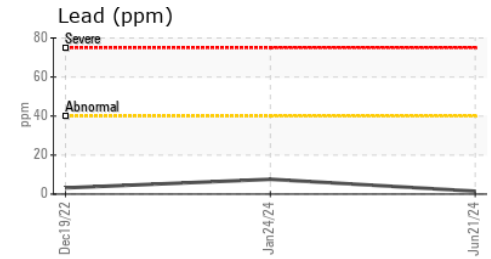
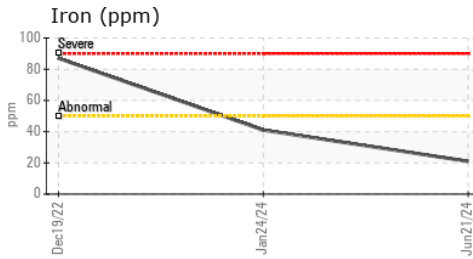
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.2	14.3	13.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119237
Lab Number : **02643956**
Unique Number : 5801495
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9

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.

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