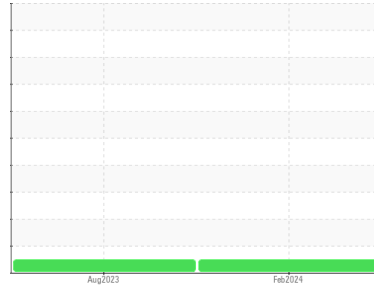




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
931036
 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		GFL0102935	GFL0087012	---
Sample Date	Client Info		13 Feb 2024	08 Aug 2023	---
Machine Age	hrs	Client Info	4585	44345	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	21	30	---
Chromium	ppm	ASTM D5185(m)	>5	1	2	---
Nickel	ppm	ASTM D5185(m)	>4	2	1	---
Titanium	ppm	ASTM D5185(m)	>5	0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	10	9	---
Lead	ppm	ASTM D5185(m)	>40	10	18	---
Copper	ppm	ASTM D5185(m)	>150	2	2	---
Tin	ppm	ASTM D5185(m)	>4	1	2	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	13	10	---
Barium	ppm	ASTM D5185(m)	10	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	60	65	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)	450	638	721	---
Calcium	ppm	ASTM D5185(m)	3000	1824	1860	---
Phosphorus	ppm	ASTM D5185(m)	1150	826	916	---
Zinc	ppm	ASTM D5185(m)	1350	1041	1099	---
Sulfur	ppm	ASTM D5185(m)	4250	2176	2089	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	8	---
Sodium	ppm	ASTM D5185(m)	>158	9	12	---
Potassium	ppm	ASTM D5185(m)	>20	17	9	---

INFRA-RED

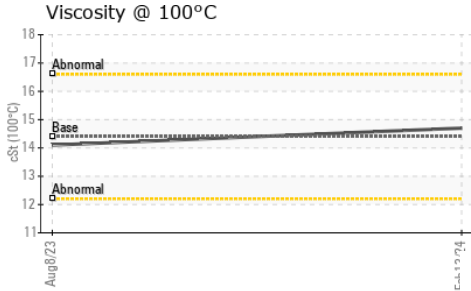
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.9	13.1	---
Sulfation	Abs./1mm	ASTM D7415*	>30	26.0	26.2	---

FLUID DEGRADATION

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



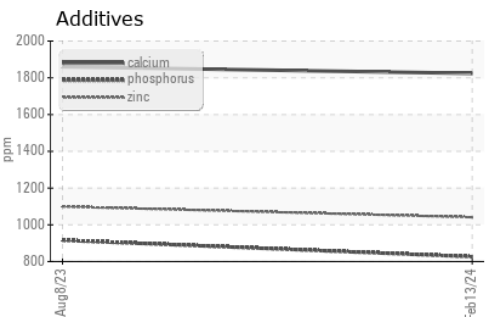
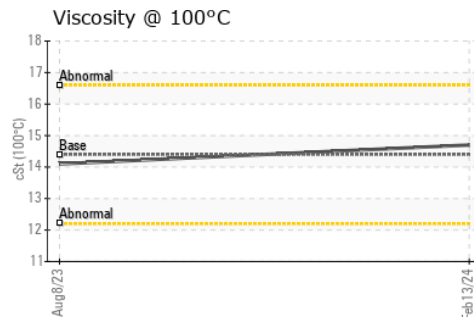
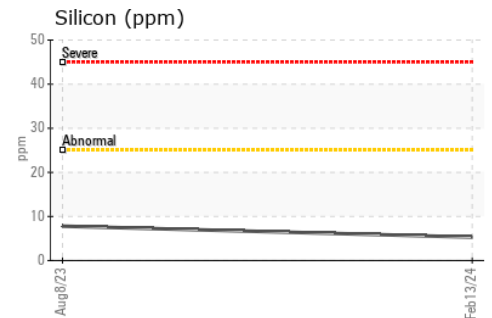
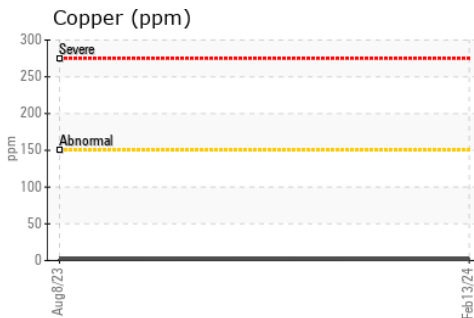
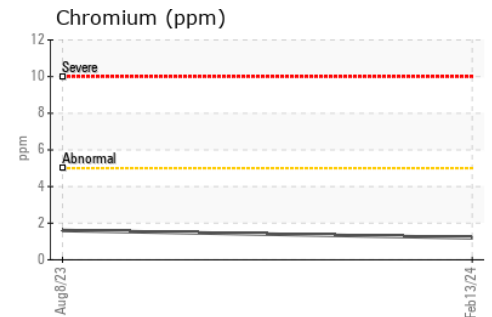
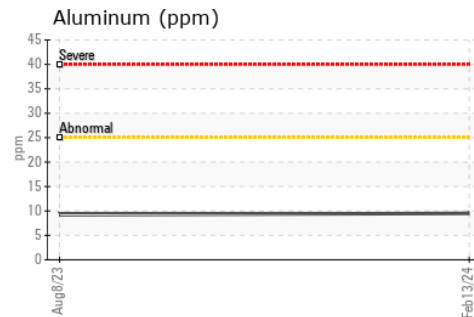
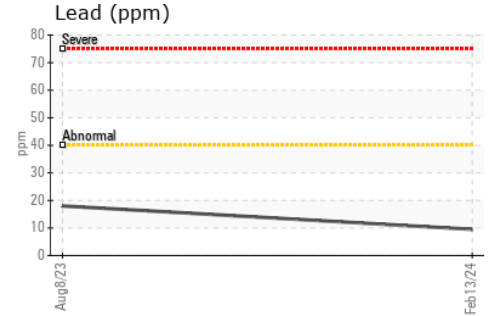
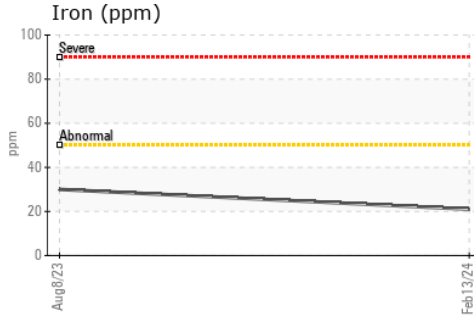
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.7	14.1

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102935
Lab Number : 02621679
Unique Number : 5746798
Test Package : MOB 1

Received : 13 Mar 2024
Tested : 13 Mar 2024
Diagnosed : 13 Mar 2024 - Wes Davis

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.

T:
F: