



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931007
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102930	GFL0066650	---
Sample Date		Client Info		27 Dec 2023	09 Mar 2023	---
Machine Age	kms	Client Info		3222	22120	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>120	35	35	---
Chromium	ppm	ASTM D5185(m)	>20	2	2	---
Nickel	ppm	ASTM D5185(m)	>5	2	1	---
Titanium	ppm	ASTM D5185(m)	>2	0	2	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	6	4	---
Lead	ppm	ASTM D5185(m)	>40	16	5	---
Copper	ppm	ASTM D5185(m)	>330	4	4	---
Tin	ppm	ASTM D5185(m)	>15	2	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

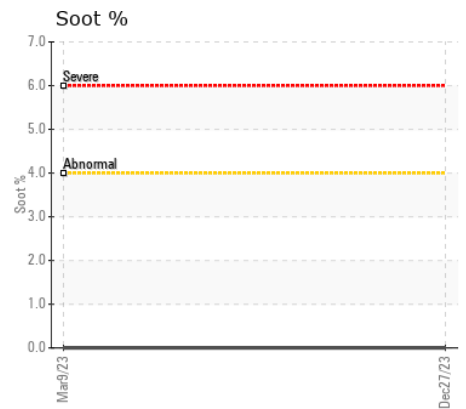
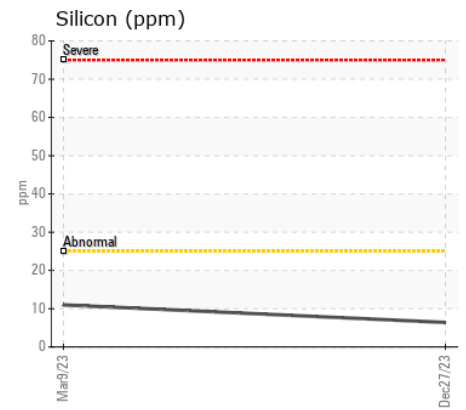
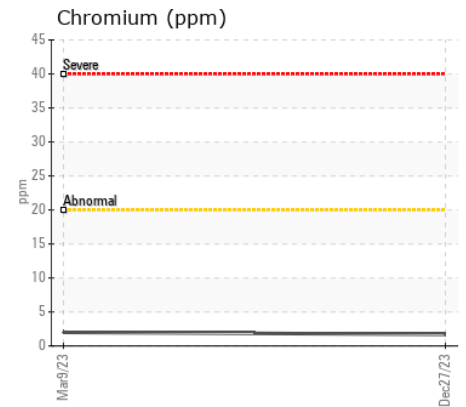
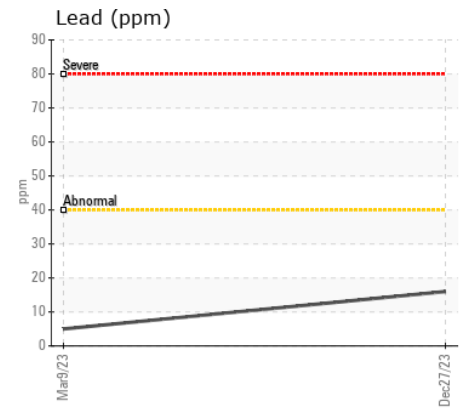
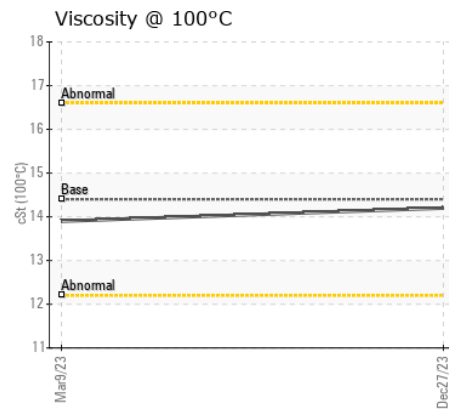
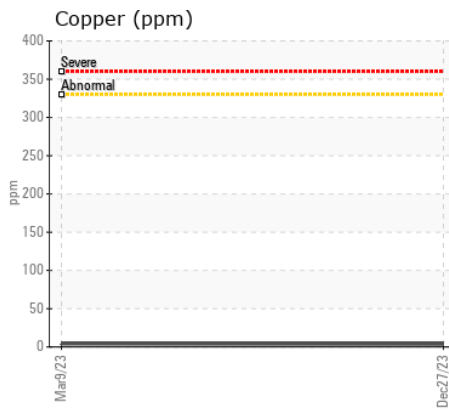
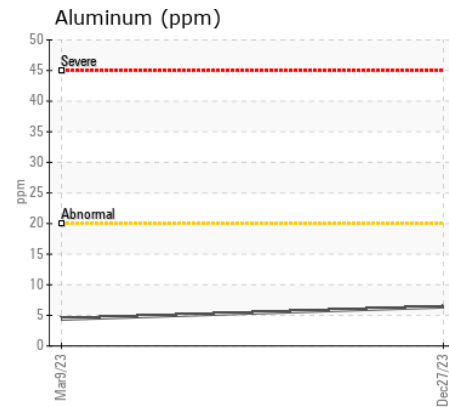
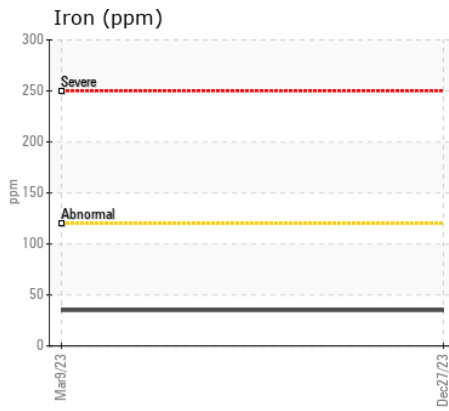
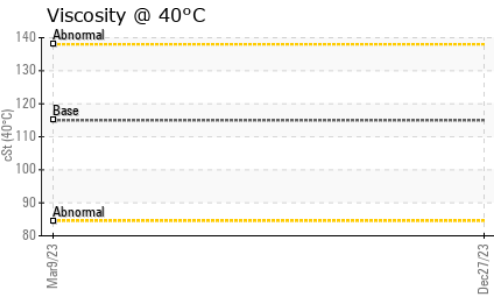
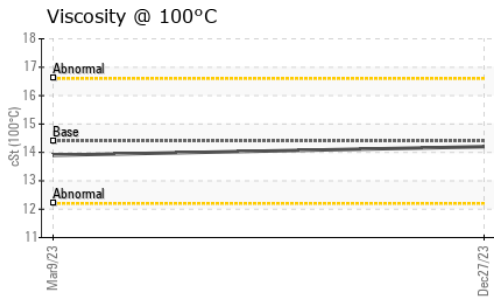
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	11	---
Potassium	ppm	ASTM D5185(m)	>20	9	7	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>4	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	14.0	10.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.7	21.5	---
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>158	13	13	---
Boron	ppm	ASTM D5185(m)	250	6	8	---
Barium	ppm	ASTM D5185(m)	10	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	61	55	---
Manganese	ppm	ASTM D5185(m)		1	2	---
Magnesium	ppm	ASTM D5185(m)	450	655	600	---
Calcium	ppm	ASTM D5185(m)	3000	1762	1750	---
Phosphorus	ppm	ASTM D5185(m)	1150	813	885	---
Zinc	ppm	ASTM D5185(m)	1350	984	1001	---
Sulfur	ppm	ASTM D5185(m)	4250	2131	2026	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.7	16.0	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	114	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.2	13.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	125	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 253 - TOR APT**
Sample No. : GFL0102930 **Received** : 09 Jan 2024 15 Bermondsey Road - Building B
Lab Number : 02607358 **Diagnosed** : 09 Jan 2024 Toronto, ON
Unique Number : 5708444 **Diagnostician** : Wes Davis CA M4B 1Y9
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)
 Contact: Sonia Ciampa
 sciampa@gflenv.com
 T: (416)740-8279
 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.