



Machine Id
931009
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		GFL0119231	GFL0100357	---
Sample Date		Client Info		29 May 2024	02 Nov 2023	---
Machine Age	kms	Client Info		2828	1665	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>120	21	36	---
Chromium	ppm	ASTM D5185(m)	>20	<1	2	---
Nickel	ppm	ASTM D5185(m)	>5	<1	1	---
Titanium	ppm	ASTM D5185(m)	>2	<1	1	---
Silver	ppm	ASTM D5185(m)	>2	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	3	5	---
Lead	ppm	ASTM D5185(m)	>40	<1	<1	---
Copper	ppm	ASTM D5185(m)	>330	2	4	---
Tin	ppm	ASTM D5185(m)	>15	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

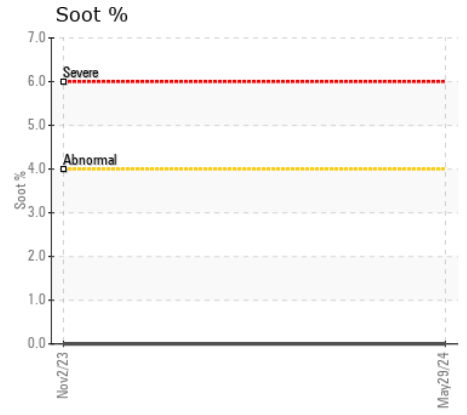
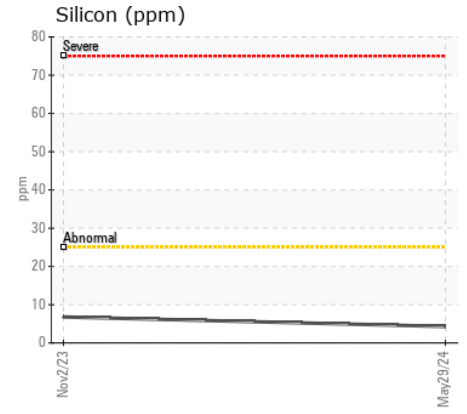
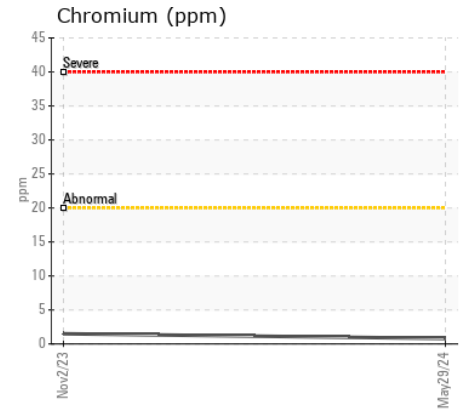
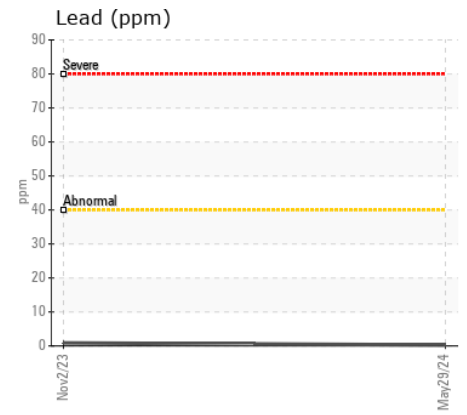
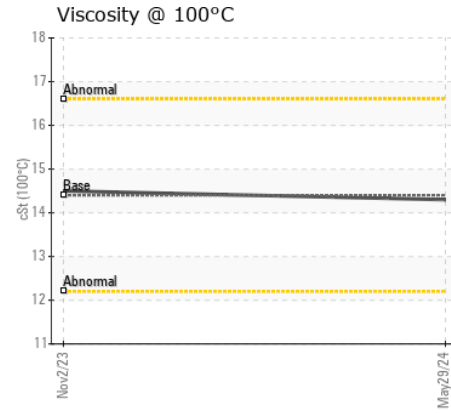
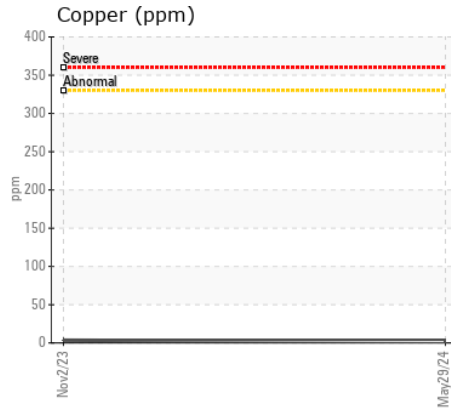
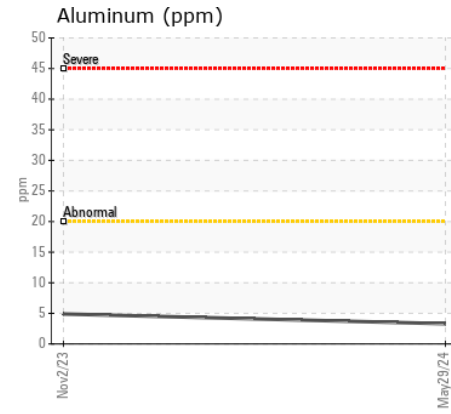
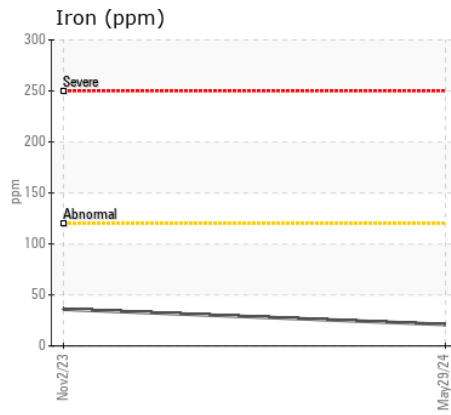
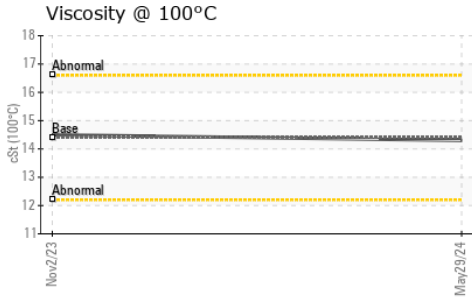
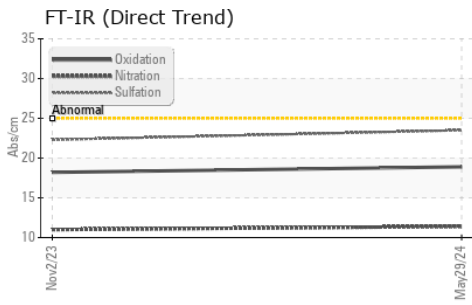
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	---
Potassium	ppm	ASTM D5185(m)	>20	8	16	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>4	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	11.4	11.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.5	22.3	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	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	7	8	---
Boron	ppm	ASTM D5185(m)	250	15	13	---
Barium	ppm	ASTM D5185(m)	10	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	57	56	---
Manganese	ppm	ASTM D5185(m)		<1	2	---
Magnesium	ppm	ASTM D5185(m)	450	588	602	---
Calcium	ppm	ASTM D5185(m)	3000	1750	1618	---
Phosphorus	ppm	ASTM D5185(m)	1150	783	743	---
Zinc	ppm	ASTM D5185(m)	1350	965	961	---
Sulfur	ppm	ASTM D5185(m)	4250	2000	2006	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.9	18.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.3	14.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119231 **Received** : 05 Jun 2024
Lab Number : 02639805 **Tested** : 05 Jun 2024
Unique Number : 5788967 **Diagnosed** : 05 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 253 - TOR APT
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 Toronto, ON
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 Contact: Natalia Stalynska
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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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F: