



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
354126
Component
Gasoline Engine
Fluid
SAE 0W30 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0090752	---	---
Sample Date		Client Info		05 Mar 2024	---	---
Machine Age	kms	Client Info		11092	---	---
Oil Age	kms	Client Info		7500	---	---
Filter Age	kms	Client Info		7500	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>150	50	---	---
Chromium	ppm	ASTM D5185(m)	>20	2	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>40	5	---	---
Lead	ppm	ASTM D5185(m)	>50	3	---	---
Copper	ppm	ASTM D5185(m)	>155	106	---	---
Tin	ppm	ASTM D5185(m)	>10	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

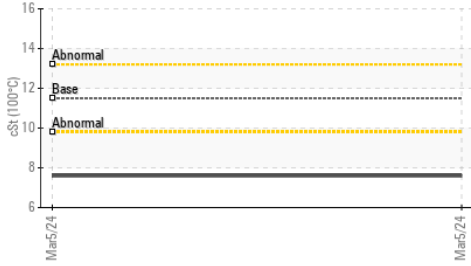
Silicon	ppm	ASTM D5185(m)	>30	91	---	---
Potassium	ppm	ASTM D5185(m)	>20	8	---	---
Fuel	%	ASTM D7593*	>4.0	1.7	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	10.5	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

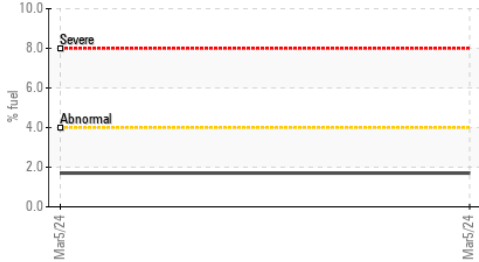
Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>12	7	---	---
Boron	ppm	ASTM D5185(m)		31	---	---
Barium	ppm	ASTM D5185(m)		1	---	---
Molybdenum	ppm	ASTM D5185(m)		151	---	---
Manganese	ppm	ASTM D5185(m)		19	---	---
Magnesium	ppm	ASTM D5185(m)		439	---	---
Calcium	ppm	ASTM D5185(m)		1251	---	---
Phosphorus	ppm	ASTM D5185(m)		614	---	---
Zinc	ppm	ASTM D5185(m)		724	---	---
Sulfur	ppm	ASTM D5185(m)		1540	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.5	▲ 7.6	---	---

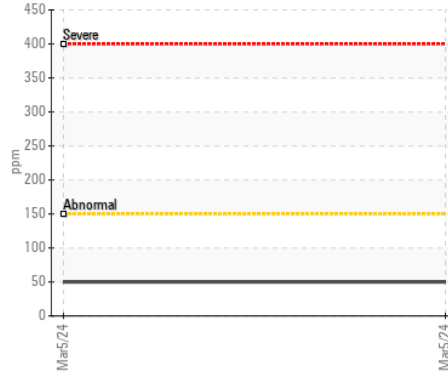
▲ Viscosity @ 100°C



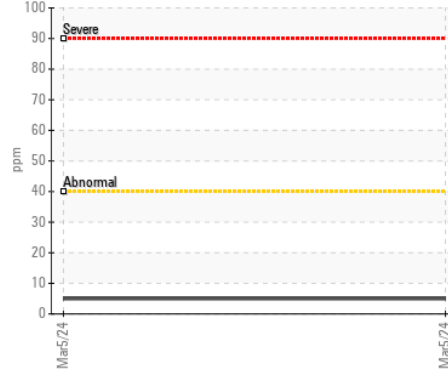
Fuel Dilution



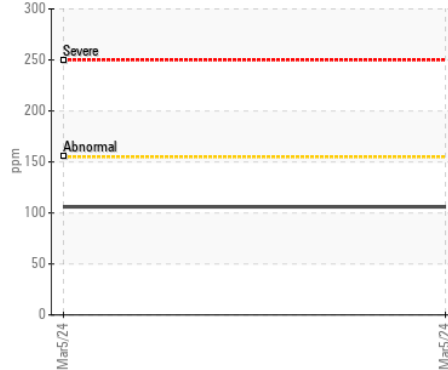
Iron (ppm)



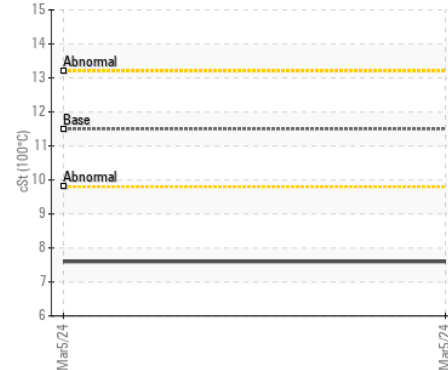
Aluminum (ppm)



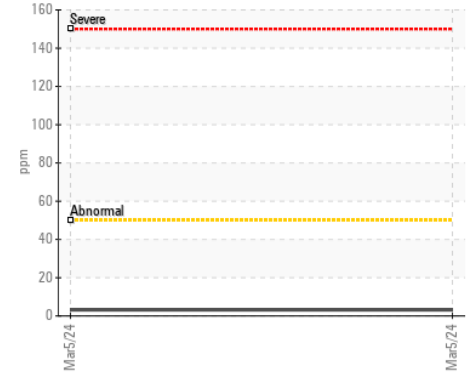
Copper (ppm)



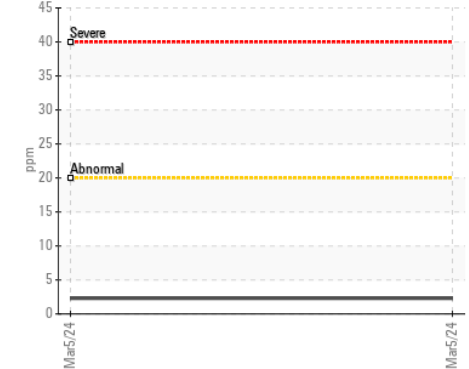
▲ Viscosity @ 100°C



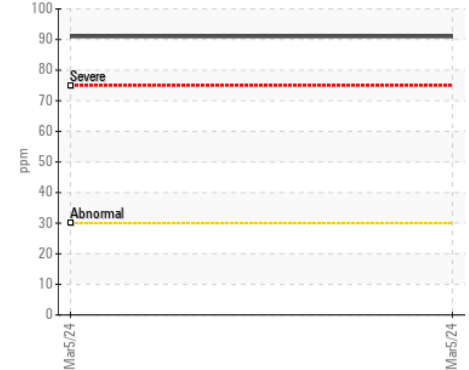
Lead (ppm)



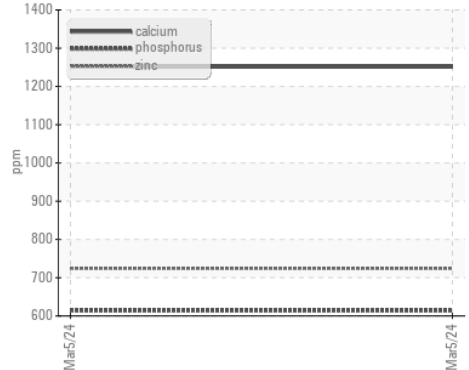
Chromium (ppm)



Silicon (ppm)



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : GFL0090752

Lab Number : 02620403

Unique Number : 5737513

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 07 Mar 2024

Tested : 08 Mar 2024

Diagnosed : 08 Mar 2024 - Kevin Marson

GFL Environmental - 504 - Edmonton

12015 28 Street NE

Edmonton, AB

CA T6S 1E2

Contact: Jerrod Adair

jerrodadair@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: