

Machine Id
357010
Component
Diesel Engine
Fluid
SAE 5W30 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0097983	---	---
Sample Date		Client Info		30 Apr 2024	---	---
Machine Age	kms	Client Info		301458	---	---
Oil Age	kms	Client Info		13944	---	---
Filter Age	kms	Client Info		13944	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	54	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	10	---	---
Lead	ppm	ASTM D5185(m)	>40	5	---	---
Copper	ppm	ASTM D5185(m)	>330	1	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

Light fuel dilution occurring.

Silicon	ppm	ASTM D5185(m)	>25	15	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>5	▲ 3.5	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.4	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

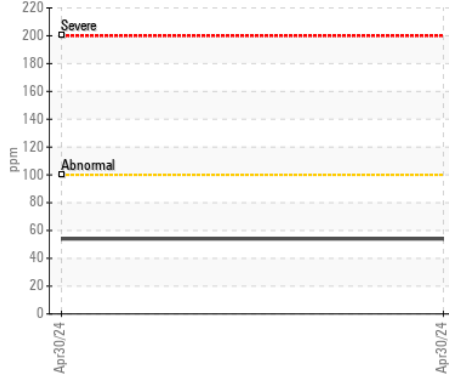
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		23	---	---
Boron	ppm	ASTM D5185(m)		● 12	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		128	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		● 402	---	---
Calcium	ppm	ASTM D5185(m)		1091	---	---
Phosphorus	ppm	ASTM D5185(m)		● 538	---	---
Zinc	ppm	ASTM D5185(m)		652	---	---
Sulfur	ppm	ASTM D5185(m)		● 1498	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	▲ 8.6	---	---

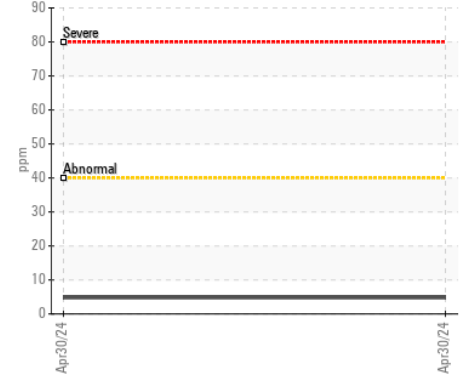
▲ Viscosity @ 100°C



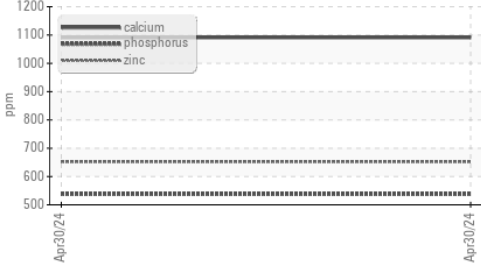
Iron (ppm)



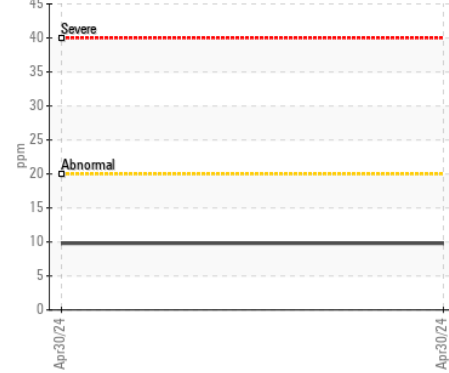
Lead (ppm)



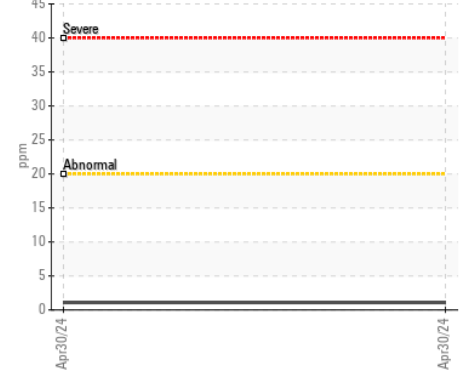
● Additives



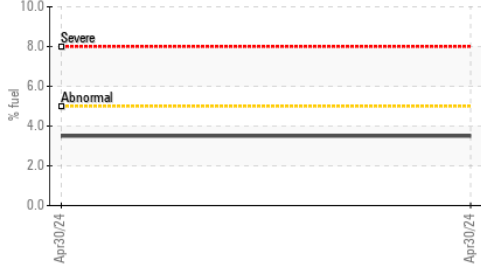
Aluminum (ppm)



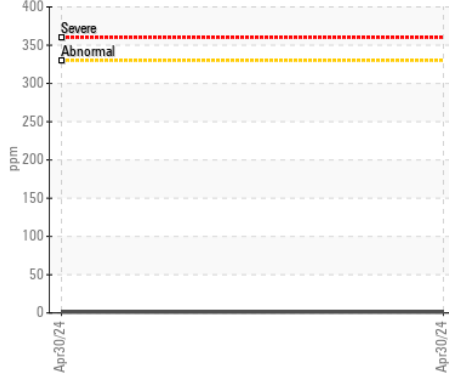
Chromium (ppm)



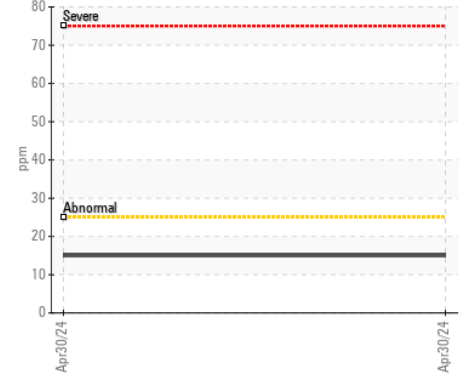
▲ Fuel Dilution



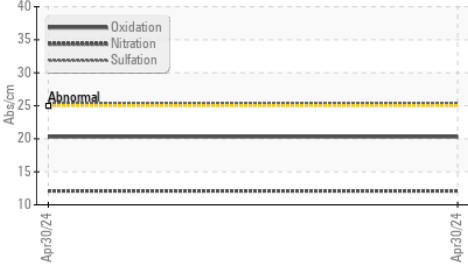
Copper (ppm)



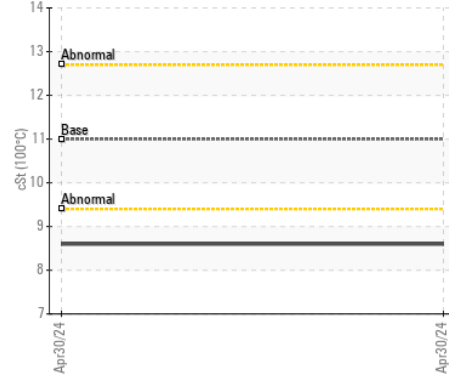
Silicon (ppm)



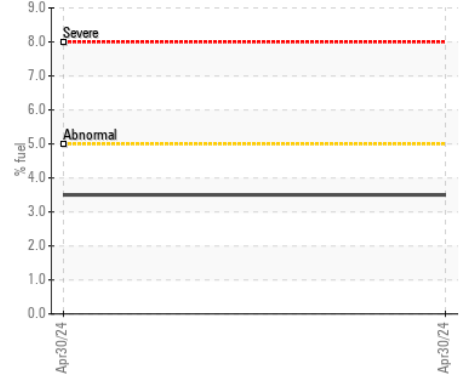
FT-IR (Direct Trend)



▲ Viscosity @ 100°C



▲ Fuel Dilution



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0097983 **Received** : 10 May 2024
Lab Number : 02634502 **Tested** : 13 May 2024
Unique Number : 5775655 **Diagnosed** : 13 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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