WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE ABNORMAL

GFL211 [1261570]

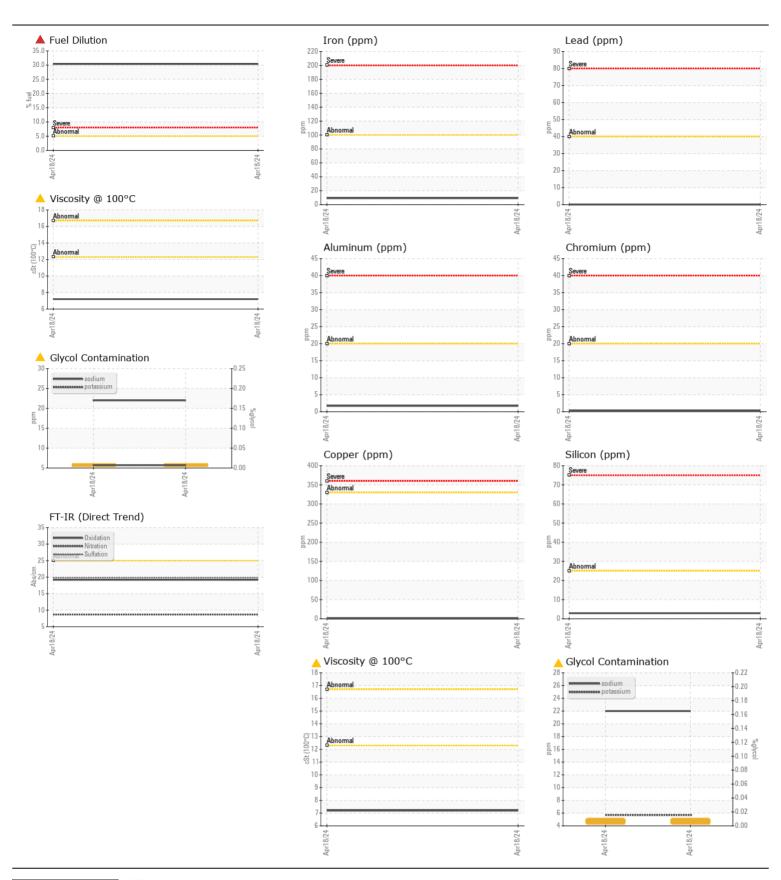
NO UNIT GFL0093964

Diesel Engine

{not provided} (LTR)							
RECOMMENDATION We advise that you check the fuel injection system. We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0093964		
	Sample Date		Client Info		18 Apr 2024		
	Machine Age	hrs	Client Info		17888		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185(m)	>100	9		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)	7 7	0		
	Silver	ppm	ASTM D5185(m)	\3	0		
	Aluminum	ppm	ASTM D5185(m)		2		
	Lead	ppm	ASTM D5185(m)	>40	0		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)	/10	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
			Visual				
CONTAMINATION Test for glycol is positive. There is a high amount of fuel present in the oil. There is a light concentration of glycol present in the oil. Tests confirm the presence of fuel in the oil.	Silicon	ppm	ASTM D5185(m)	>25	3		
	Potassium	ppm	ASTM D5185(m)	>20	<u>^</u> 6		
	Fuel	%	ASTM D7593*	>5	▲ 30.4		
	Water		WC Method	>0.2	NEG		
	Glycol	%	ASTM D7922*		<u> </u>		
	Soot %	%	ASTM D7844*	>3	0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	8.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		22		
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185(m)		6		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		40		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		625		
	Calcium	ppm	ASTM D5185(m)		712		
	Phosphorus	ppm	ASTM D5185(m)		660		
	Zinc	ppm	ASTM D5185(m)		768		
	Sulfur	ppm	ASTM D5185(m)		1722		
	Oxidation		ASTM D7414*	>25	19.2		

Visc @ 100°C cSt ASTM D7279(m)

7.2





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0093964 Lab Number : 02631505

Unique Number : 5772658

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 777 - Belleville-Municipal waste Received : 26 Apr 2024 **Tested**

: 29 Apr 2024 Diagnosed

: 29 Apr 2024 - Wes Davis Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel, Visual)

197 Putman Industrial Road Belleville, ON **CA K8N 4Z6** Contact: Andrea Michael amichael@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.

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