**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

## **NO UNIT GFL0107915**

Component Diesel Engine

Fluid							
{not provided} ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component make and model with your next sample.	Sample Number		Client Info		GFL0107915		
	Sample Date		Client Info		26 Feb 2024		
	Machine Age	hrs	Client Info		0		
	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				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	26		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		2		
	Nickel	ppm	ASTM D5185(m)		- <1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	6		
	Lead	ppm	ASTM D5185(m)	>40	1		
	Copper	ppm	ASTM D5185(m)	>330	2		
	Tin	ppm	ASTM D5185(m)	>15	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	8		
Fuel content negligible. Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		9		
	Fuel	%	ASTM D7593*	>5	0.9		
	Water	, 0	WC Method		NEG		
	Glycol		WC Method	7 0.2	NEG		
	Soot %	%	ASTM D7844*	>3	0.4		
	Nitration	Abs/cm	ASTM D7624*	>20	10.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	23.7		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4		
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		2		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		67		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		1054		
	Calcium	ppm	ASTM D5185(m)		1205		
	Phosphorus	ppm	ASTM D5185(m)		1126		
	Zinc	ppm	ASTM D5185(m)		1297		
	Sulfur	ppm	ASTM D5185(m)		2878		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	20.0		
	Visc @ 100°C	cSt	ASTM D7279(m)		11.8		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02618245 Unique Number : 5735355

: GFL0107915

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received **Tested** Diagnosed

: 27 Feb 2024 : 28 Feb 2024 : 28 Feb 2024 - Kevin Marson

GFL Environmental - 350 - Emeral Park Regina 2B Industrial Drive,, Great Plains Industrial Park, Emerald Park, SK CA S4L 1B6 Contact: David Klein

dklein@gflenv.com

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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