**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id **813070** 

Component Diesel Engine

Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status	kms kms kms	Client Info Client Info Client Info Client Info Client Info Client Info Client Info		GFL0105891 28 Mar 2024 55112 0 0 Changed	GFL0076459 03 Apr 2023 976 465 465	
Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status	kms	Client Info Client Info Client Info Client Info		55112 0 0	976 465 465	
Oil Age Filter Age Oil Changed Filter Changed Sample Status	kms	Client Info Client Info Client Info		0	465 465	
Filter Age Oil Changed Filter Changed Sample Status		Client Info		0	465	
Oil Changed Filter Changed Sample Status	kms	Client Info				
Filter Changed Sample Status				Changed	01	
Sample Status		Client Info			Changed	
				N/A	Changed	
Iron				NORMAL	NORMAL	
	ppm	ASTM D5185(m)	>80	7	14	
Chromium	ppm	ASTM D5185(m)		0	0	
		. ,				
		, ,	>3			
		. ,				
		, ,				
		. ,		1		
Tin				0	<1	
Vanadium	ppm	ASTM D5185(m)		0	0	
	ppm	. ,	>20	4	4	
	ppm	, ,	>20	<1		
	%					
			>0.2			
-	-1		0			
Emulsined water	scalar	visuai	>0.2	NEG	NEG	
Sodium	ppm	ASTM D5185(m)		2	3	
Boron	ppm	ASTM D5185(m)		3	117	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		303	9	
Manganese	ppm	ASTM D5185(m)		0	<1	
Magnesium	ppm	ASTM D5185(m)		1041	82	
Calcium	ppm	ASTM D5185(m)		1116	2332	
Phosphorus	ppm	ASTM D5185(m)		1181	1030	
Zinc	ppm	ASTM D5185(m)		1267	1158	
Sulfur	ppm	ASTM D5185(m)		2849	2994	
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	10.1	
	Vanadium  Silicon  Potassium  Fuel  Water  Glycol  Soot %  Nitration  Sulfation  Emulsified Water  Sodium  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Silicon ppm Potassium ppm Fuel % Water Glycol Soot % % Nitration Abs/cm Sulfation Abs/.1mm Emulsified Water scalar Sodium ppm Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Phosphorus ppm Sulfur ppm Sulfur ppm Sulfur ppm Oxidation Abs/.1mm	Titanium ppm ASTM D5185(m)  Silver ppm ASTM D5185(m)  Aluminum ppm ASTM D5185(m)  Lead ppm ASTM D5185(m)  Copper ppm ASTM D5185(m)  Tin ppm ASTM D5185(m)  Vanadium ppm ASTM D5185(m)  Silicon ppm ASTM D5185(m)  Potassium ppm ASTM D5185(m)  Fuel % ASTM D7593*  Water WC Method  Glycol WC Method  Soot % % ASTM D7844*  Nitration Abs/cm ASTM D7624*  Sulfation Abs/.1mm ASTM D7415*  Emulsified Water scalar Visual*  Sodium ppm ASTM D5185(m)  Barium ppm ASTM D5185(m)  Molybdenum ppm ASTM D5185(m)  Magnesium ppm ASTM D5185(m)  Magnesium ppm ASTM D5185(m)  Calcium ppm ASTM D5185(m)  ASTM D5185(m)	Titanium         ppm         ASTM D5185(m)         >3           Aluminum         ppm         ASTM D5185(m)         >30           Lead         ppm         ASTM D5185(m)         >30           Copper         ppm         ASTM D5185(m)         >150           Tin         ppm         ASTM D5185(m)         >5           Vanadium         ppm         ASTM D5185(m)         >20           Potassium         ppm         ASTM D5185(m)         >20           Potassium         ppm         ASTM D5185(m)         >20           Fuel         %         ASTM D5185(m)         >20           Fuel         %         ASTM D7933*         >5           Water         WC Method         >0.2           Glycol         WC Method         >0.2           Soot %         %         ASTM D7844*         >3           Nitration         Abs/cm         ASTM D7624*         >20           Sulfation         Abs/.1mm         ASTM D7415*         >30           Emulsified Water         scalar         Visual*         >0.2           Sodium         ppm         ASTM D5185(m)           Barium         ppm         ASTM D5185(m)           Magnesium	Titanium         ppm         ASTM D5185(m)         >3         0           Silver         ppm         ASTM D5185(m)         >3         0           Aluminum         ppm         ASTM D5185(m)         >30         4           Lead         ppm         ASTM D5185(m)         >30         0           Copper         ppm         ASTM D5185(m)         >1         1           Tin         ppm         ASTM D5185(m)         >5         0           Vanadium         ppm         ASTM D5185(m)         >5         0           Silicon         ppm         ASTM D5185(m)         >20         4           Potassium         ppm         ASTM D5185(m)         >20         <1	Titanium         ppm         ASTM D5185(m)         0         <1           Silver         ppm         ASTM D5185(m)         >3         0         0           Aluminum         ppm         ASTM D5185(m)         >30         4         3           Lead         ppm         ASTM D5185(m)         >30         0         <1





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02626020 Unique Number : 5759152

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0105891 Received

**Tested** Diagnosed

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-268-2131.

: 02 Apr 2024

: 03 Apr 2024

: 03 Apr 2024 - Kevin Marson

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.

GFL Environmental - 348

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