WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id 501004

Component Diesel Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0100835		
	Sample Date		Client Info		16 Jan 2024		
	Machine Age	hrs	Client Info		27954		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
/EAR	Iron	ppm	ASTM D5185(m)	>100	25		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1		
	Nickel	ppm	ASTM D5185(m)	>2	<1		
	Titanium	ppm	ASTM D5185(m)	>2	0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>25	2		
	Lead	ppm	ASTM D5185(m)	>40	3		
	Copper	ppm	ASTM D5185(m)	>330	11		
	Tin	ppm	ASTM D5185(m)	>15	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
ONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	8		
	Potassium	ppm	ASTM D5185(m)		<1		
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.3		
	Nitration	Abs/cm	ASTM D7624*	>20	11.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	23.1		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	10		
	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)	100	66		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)	450	852		
	Calcium	ppm	ASTM D5185(m)	3000	1273		
	Phosphorus	ppm	ASTM D5185(m)	1150	1018		
	Zinc	ppm	ASTM D5185(m)	1350	1205		
	Sulfur	ppm	ASTM D5185(m)	4250	2670		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	21.1		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: GFL0100835

: 02610835 Unique Number : 5719930 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 520 - Winterburn Recieved : 24 Jan 2024 Diagnosed

: 25 Jan 2024 Diagnostician : Kevin Marson

20204 - 113 Avenue, Edmonton, AB **CA T5S 0G3** Contact: Jaekyung Ko jko@gflenv.com T: (780)444-8805

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.