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

Machine Id

212034 Component Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0118559	GFL0107876	
	Sample Date		Client Info		14 May 2024	29 Feb 2024	
	Machine Age	kms	Client Info		711705	0	
	Oil Age	kms	Client Info		0	0	
	Filter Age	kms	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>100	19	23	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
	Nickel	ppm	ASTM D5185(m)		0	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	1	2	
	Lead	ppm	ASTM D5185(m)	>40	3	4	
	Copper	ppm	ASTM D5185(m)	>330	134	154	
	Tin	ppm	ASTM D5185(m)	>15	<1	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	nnm	ASTM D5185(m)	> 25	3	5	
	Potassium	ppm	ASTM D5185(m)		1	<1	
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	7 0.2	NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0.3	0.4	
	Nitration	Abs/cm	ASTM D7624*	>20	9.5	10.0	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	20.7	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	1	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	6	4	
	Barium	ppm	ASTM D5185(m)	10	0	0	
	Molybdenum	ppm	ASTM D5185(m)	100	58	59	
	Manganese	ppm	ASTM D5185(m)		<1	0	
	Magnesium	ppm	ASTM D5185(m)	450	938	954	
	Calcium	ppm	ASTM D5185(m)		1038	1062	
	Phosphorus	ppm	ASTM D5185(m)		943	994	
	Zinc	ppm	ASTM D5185(m)		1142	1170	
	Sulfur	ppm	ASTM D5185(m)		2332	2545	
	Oxidation	Abs/.1mm	ASTM D7414*		17.9	17.6	
	Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.1	11.4	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 310 - Winnipeg : GFL0118559

Lab Number : 02639575 Unique Number : 5788737 Test Package : MOB 1

Received **Tested** Diagnosed

: 04 Jun 2024 : 05 Jun 2024

: 05 Jun 2024 - Wes Davis

#360 - 555 Hervo Street, Winnipeg, MB CA R3T 3L6 Contact: Joshua Lourenco jlourenco@gflenv.com T: (204)987-9600

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.