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

Machine Id 401115

## Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		GFL0096740	GFL0096733	
	Sample Date		Client Info		10 Apr 2024	15 Jan 2024	
	Machine Age	hrs	Client Info		0	37220	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	600	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	ppm	ASTM D5185(m)	>100	15	7	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1	0	
	Nickel	ppm	ASTM D5185(m)	>4	0	0	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	2	2	
	Lead	ppm	ASTM D5185(m)	>40	2	2	
	Copper	ppm	ASTM D5185(m)	>330	1	<1	
	Tin	ppm	ASTM D5185(m)	>15	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	4	4	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0.7	0.2	
	Nitration	Abs/cm	ASTM D7624*	>20	10.8	7.3	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	23.7	20.1	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		17	5	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	4	4	
	Barium	ppm	ASTM D5185(m)	0	0	0	
	Molybdenum	ppm	ASTM D5185(m)	60	64	58	
	Manganese	ppm	ASTM D5185(m)	0	<1	0	
	Magnesium	ppm	ASTM D5185(m)	1010	1019	960	
	Calcium	ppm	ASTM D5185(m)	1070	1125	1073	
	Phosphorus	ppm	ASTM D5185(m)	1150	1036	1019	
	Zinc	ppm	ASTM D5185(m)	1270	1238	1170	
	Sulfur	ppm	ASTM D5185(m)	2060	2487	2714	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	21.2	15.7	
	Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.1	14.1	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0096740 Lab Number : 02630875

Unique Number : 5772028 Test Package : MOB 1

Received : 23 Apr 2024 **Tested** Diagnosed

: 23 Apr 2024 : 23 Apr 2024 - Wes Davis

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet 70 Golden Drive, Coquitlam, BC CA V3K 6B5 Contact: Sanjay Kisun skisun@gflenv.com

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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.