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

**NORMAL NORMAL NORMAL** 

Machine Id **522002** 

Component Diesel Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0082182		
	Sample Date		Client Info		28 Dec 2023		
	Machine Age	hrs	Client Info		22995		
	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	11		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>2	<1		
	Aluminum	ppm	ASTM D5185(m)	>25	1		
	Lead	ppm	ASTM D5185(m)	>40	<1		
	Copper	ppm	ASTM D5185(m)	>330	4		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
ONTAMINATION	Silicon	ppm	ASTM D5185(m)	<b>&gt;</b> 25	3		
	Potassium	ppm	ASTM D5185(m)		5		
There is no indication of any contamination in the oil.	Fuel	ррш	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.3		
	Nitration	Abs/cm	ASTM D7624*	>20	8.1		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)	>158	5		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	3		
	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)	100	55		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)	450	881		
	Calcium	ppm	ASTM D5185(m)	3000	1006		
	Phosphorus	ppm	ASTM D5185(m)	1150	958		
	Zinc	ppm	ASTM D5185(m)	1350	1094		
	Sulfur	ppm	ASTM D5185(m)		2580		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

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

Test Package : MOB 1

: GFL0082182 : 02608099 Unique Number : 5709185

Recieved : 11 Jan 2024 Diagnosed : 11 Jan 2024

Diagnostician : Wes Davis

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.

GFL Environmental - 593 4421 Boban Drive Nanaimo, BC **CA V9T 6A6** Contact: Patrick Rutti prutti@gflenv.com T: (250)739-3345

Contact/Location: Patrick Rutti - GFL593