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



## Machine Id **FREIGHTLINER 821073**

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0122258		
	Sample Date		Client Info		24 May 2024		
	Machine Age	hrs	Client Info		13005		
	Oil Age	hrs	Client Info		663		
	Filter Age	hrs	Client Info		663		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185(m)	>80	29		
	Chromium	ppm	ASTM D5185(m)		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)		<1		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>30	3		
	Lead	ppm	ASTM D5185(m)	>30	0		
	Copper	ppm	ASTM D5185(m)	>150	<1		
	Tin	ppm	ASTM D5185(m)	>5	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	6		
SONTAMINATION	Potassium	ppm	ASTM D5185(m)		1		
There is no indication of any contamination in the oil.	Fuel	PP	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.4		
	Nitration	Abs/cm	ASTM D7624*	>20	8.0		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	VLITE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION  The condition of the oil is acceptable for the time in service.	Sodium	ppm	ASTM D5185(m)		2		
	Boron	ppm	ASTM D5185(m)	0	3		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		63		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		1011		
	Calcium	ppm	ASTM D5185(m)		1117		
	Phosphorus	ppm	ASTM D5185(m)	1150	1005		
	Zinc	ppm	ASTM D5185(m)		1225		
	Sulfur	ppm	ASTM D5185(m)	2060	2440		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9		
	Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.1		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 987 - Charlottetown : GFL0122258 Lab Number : 02640171

Unique Number : 5789333

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: Visual)

: 06 Jun 2024 : 06 Jun 2024

: 06 Jun 2024 - Wes Davis

7 Superior Crescent Charlottetown, PE CA C1A 7N5 Contact: Vicki Metcalfe vmetcalfe@gflenv.com T: (782)377-5918

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.

F: (506)453-9490