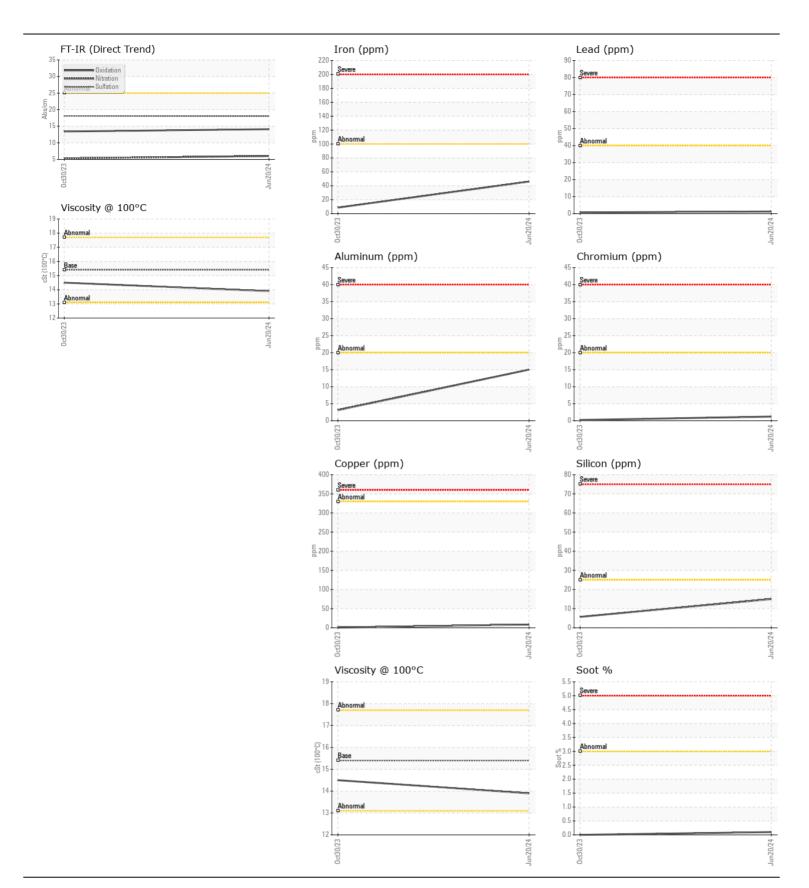
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id 427016

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0097984	GFL0082146	
	Sample Date		Client Info		20 Jun 2024	30 Oct 2023	
	Machine Age	kms	Client Info		467279	461579	
	Oil Age	kms	Client Info		5700	3095	
	Filter Age	kms	Client Info		5700	3095	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
/EAR	Iron	ppm	ASTM D5185(m)	>100	46	9	
PAIL	Chromium	ppm	ASTM D5185(m)		1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		<1	0	
	Titanium	ppm	ASTM D5185(m)		<1	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)		15	3	
	Lead	ppm	ASTM D5185(m)		1	<1	
	Copper	ppm	ASTM D5185(m)		8	<1	
	Tin	ppm	ASTM D5185(m)		0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Ciliana		ACTM DE10E()	0.5	45		
ONTAMINATION	Silicon Potassium	ppm	ASTM D5185(m) ASTM D5185(m)		15 1	6 0	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	70.2	NEG	NEG	
	Soot %	%	ASTM D7844*	\ 3	0.1	0	
	Nitration	Abs/cm	ASTM D7624*	>20	6.0	5.3	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	18.1	
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water		Visual*	>0.2	NEG	NEG	
LUID CONDITION	Codiu		ACTM DE40E/sel		A.E.	17	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	0	45	17	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		3	6	
	Barium	ppm	ASTM D5185(m)		0	<1	
	Molybdenum	ppm	ASTM D5185(m)		58	59	
	Manganese	ppm	ASTM D5185(m)		<1 060	0	
	Magnesium	ppm	ASTM D5185(m)		960	963	
	Calcium	ppm	ASTM D5185(m)		1048	1036	
	Phosphorus	ppm	ASTM D5185(m)		986	992	
	Zinc	ppm	ASTM D5185(m)		1180	1160	
	Sulfur	ppm Abs/.1mm	ASTM D5185(m) ASTM D7414*		2573 14.1	2555 13.4	
	Oxidation						





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0097984 Lab Number : 02644774

Unique Number : 5802313

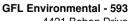
Received **Tested** Diagnosed : 02 Jul 2024

: 02 Jul 2024

: 02 Jul 2024 - Kevin Marson

Test Package : MOB 1 (Additional Tests: Visual)

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.



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

Report Id: GFL593 [WCAMIS] 02644774 (Generated: 07/02/2024 13:37:48) Rev: 1