**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

History2

History1



933027 Component Natural Gas Engine {not provided} (--- GAL)

Test

UOM

Method

		NDA	

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Sample Number		Client Info		GFL0102931	 
Sample Date		Client Info		15 Nov 2023	 
Machine Age	hrs	Client Info		0	 
Oil Age	hrs	Client Info		0	 
Filter Age	hrs	Client Info		0	 
Oil Changed		Client Info		Changed	 
Filter Changed		Client Info		Changed	 
Sample Status				ABNORMAL	 
PQ		ASTM D8184*	>45	0	 
Iron	ppm	ASTM D5185(m)	>50	69	 
Chromium	10.10.100	ACTM DE10E(m)	. E	2	

Limit/Abn Current

## **WEAR**

All component wear rates are normal.

Filter Age	hrs	Client Info		0	 
Oil Changed		Client Info		Changed	 
Filter Changed		Client Info		Changed	 
Sample Status				ABNORMAL	 
PQ		ASTM D8184*	>45	0	 
Iron	ppm	ASTM D5185(m)	>50	69	 
Chromium	ppm	ASTM D5185(m)	>5	3	 
Nickel	ppm	ASTM D5185(m)	>4	2	 
Titanium	ppm	ASTM D5185(m)	>5	0	 
Silver	ppm	ASTM D5185(m)	>3	<1	 
Aluminum	ppm	ASTM D5185(m)	>25	20	 
Lead	ppm	ASTM D5185(m)	>40	2	 
Copper	ppm	ASTM D5185(m)	>150	16	 
Tin	ppm	ASTM D5185(m)	>4	1	 
Vanadium	ppm	ASTM D5185(m)		0	 
White Metal	scalar	Visual*	NONE	NONE	 
Yellow Metal	scalar	Visual*	NONE	VLITE	 
Silicon	ppm	ASTM D5185(m)	>25	<b>28</b>	 
Potassium	ppm	ASTM D5185(m)	>20	13	 
Water		WC Method	>0.1	NEG	 

## CONTAMINATION

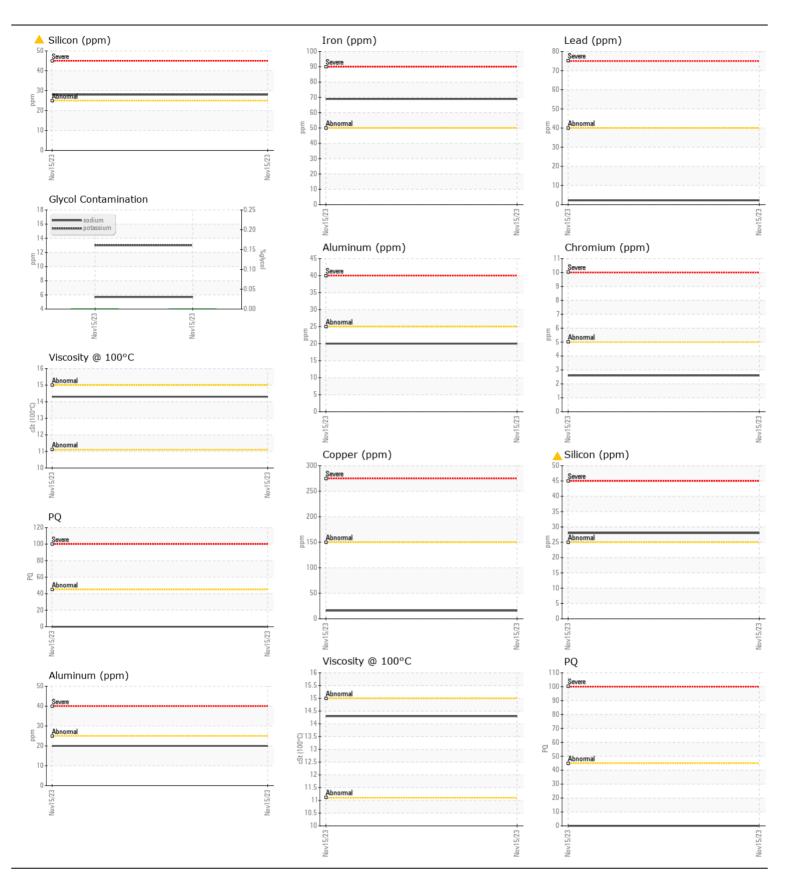
There is a moderate concentration of dirt present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>28</b>	 
Potassium	ppm	ASTM D5185(m)	>20	13	 
Water		WC Method	>0.1	NEG	 
Glycol	%	ASTM D7922*		0.0	 
Soot %	%	ASTM D7844*		0	 
Nitration	Abs/cm	ASTM D7624*	>20	12.6	 
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.5	 
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	 
<b>Emulsified Water</b>	scalar	Visual*	>0.1	NEG	 
Sodium	ppm	ASTM D5185(m)		6	 
Boron	ppm	ASTM D5185(m)		8	 
D i		AOTA DE (OF ()		_	

## **FLUID CONDITION**

The oil is no longer serviceable due to the presence of contaminants.

Odor	scalar	Visual^	NORML	NORML	 
<b>Emulsified Water</b>	scalar	Visual*	>0.1	NEG	 
Sodium	ppm	ASTM D5185(m)		6	 
Boron	ppm	ASTM D5185(m)		8	 
Barium	ppm	ASTM D5185(m)		3	 
Molybdenum	ppm	ASTM D5185(m)		55	 
Manganese	ppm	ASTM D5185(m)		11	 
Magnesium	ppm	ASTM D5185(m)		731	 
Calcium	ppm	ASTM D5185(m)		1337	 
Phosphorus	ppm	ASTM D5185(m)		718	 
Zinc	ppm	ASTM D5185(m)		855	 
Sulfur	ppm	ASTM D5185(m)		1927	 
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.1	 
Visc @ 100°C	cSt	ASTM D7279(m)		14.3	 





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: GFL0102931 : 02607357

: 5708443

Recieved Diagnosed

: 09 Jan 2024 : 12 Jan 2024

Diagnostician : Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 253 - TOR APT 15 Bermondsey Road - Building B

Toronto, ON CA M4B 1Y9

Test Package : MOB 1 (Additional Tests: BottomAnalysis, FILTERPATCH, Glycol, PQ, Visual)

Contact: Sonia Ciampa sciampa@gflenv.com

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.