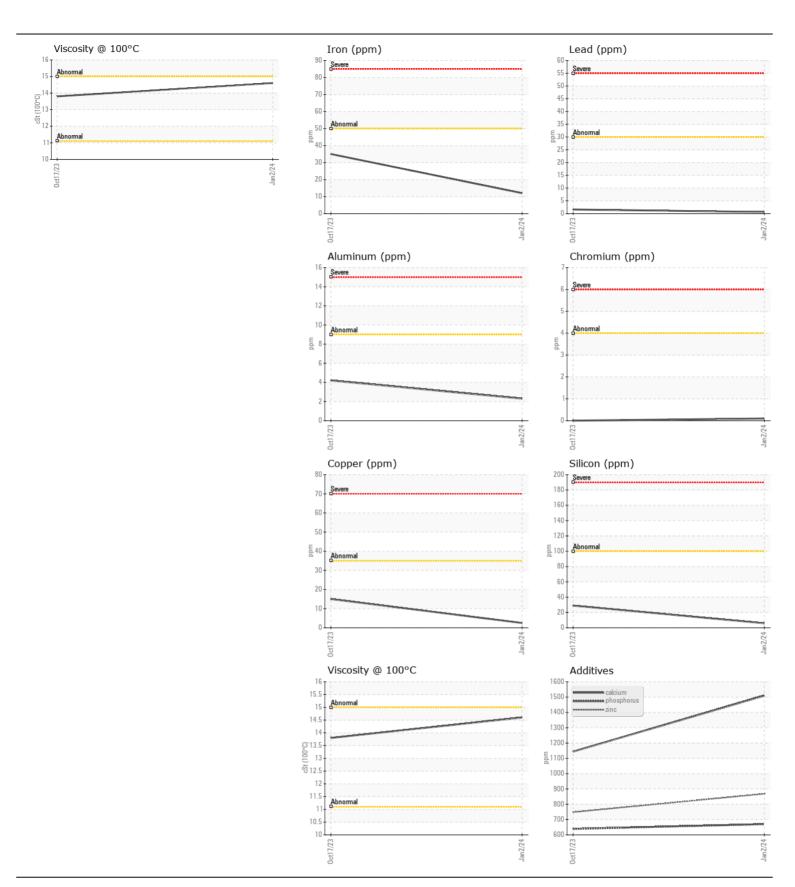


Area
GFL218
Machine Id
833046
Component

Component
Natural Gas Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0107871	GFL0097014	
	Sample Date		Client Info		02 Jan 2024	17 Oct 2023	
	Machine Age	kms	Client Info		10649	6163	
	Oil Age	kms	Client Info		0	0	
	Filter Age	kms	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>50	12	35	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>4	<1	0	
	Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)	>9	2	4	
	Lead	ppm	ASTM D5185(m)	>30	<1	2	
	Copper	ppm	ASTM D5185(m)	>35	2	15	
	Tin	ppm	ASTM D5185(m)	>4	<1	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>+100	6	29	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	13	
	Water		WC Method	>0.1	NEG	NEG	
	Soot %	%	ASTM D7844*		0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	9.8	7.4	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0	21.1	
	Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		7	4	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		8	16	
	Barium	ppm	ASTM D5185(m)		0	2	
	Molybdenum	ppm	ASTM D5185(m)		53	87	
	Manganese	ppm	ASTM D5185(m)		<1	8	
	Magnesium	ppm	ASTM D5185(m)		536	587	
	Calcium	ppm	ASTM D5185(m)		1509	1144	
	Phosphorus	ppm	ASTM D5185(m)		670	639	
	Zinc	ppm	ASTM D5185(m)		868	748	
	Sulfur	ppm	ASTM D5185(m)		2080	2166	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	16.0	15.6	
	Visc @ 100°C	cSt	ASTM D7279(m)		14.6	13.8	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5708479 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 225 - COT(D2) : GFL0107871 : 02607393

Recieved Diagnosed Diagnostician

: 09 Jan 2024 : 09 Jan 2024

: Wes Davis

20 Brydon Drive Etobicoke, ON CA M9W 5R6 Contact: Rick Philip rphilip@gflenv.com T: (416)745-8080

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.