WEAR CONTAMINATION FLUID CONDITION

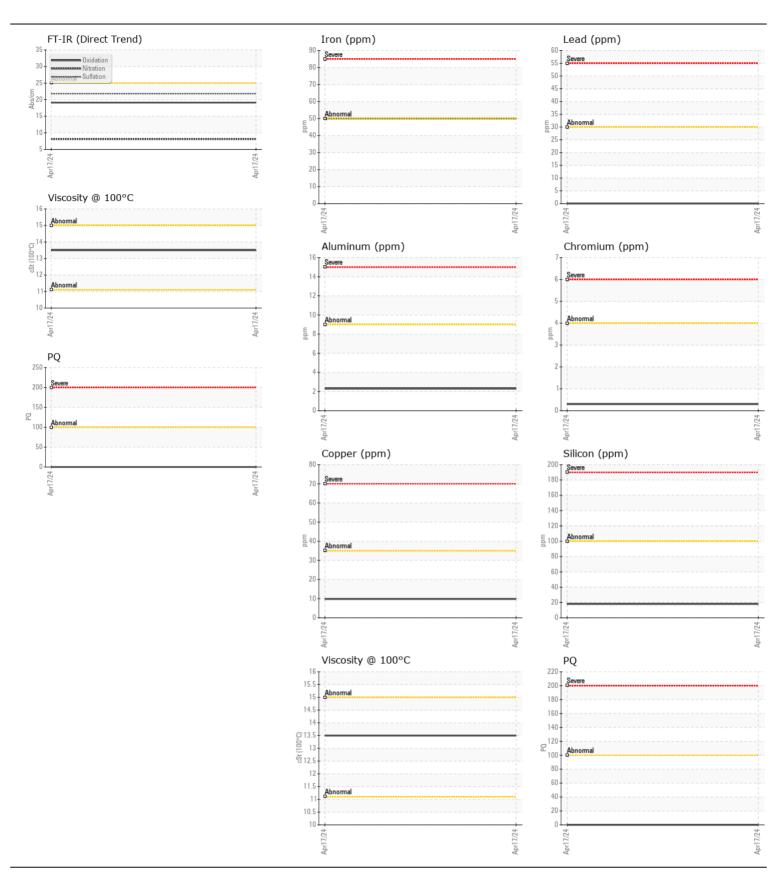
NORMAL NORMAL



GFL218
Machine Id
734005
Component
Natural Gas Engine
Fluid
Front provided 1 ( CAN

Natural Gas Engine   Fluid   {not provided} ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		GFL0118303		
	Sample Date		Client Info		17 Apr 2024		
	Machine Age	kms	Client Info		7040		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	PQ		ASTM D8184*		0		
Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185(m)	>50	50		
	Chromium	ppm	ASTM D5185(m)	>4	<1		
	Nickel	ppm	ASTM D5185(m)	>2	<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>9	2		
	Lead	ppm	ASTM D5185(m)	>30	0		
	Copper	ppm	ASTM D5185(m)	>35	10		
	Tin	ppm	ASTM D5185(m)	>4	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>+100	18		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	3		
	Water		WC Method	>0.1	NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	8.1		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8		
	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		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		25		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		54		
	Manganese	ppm	ASTM D5185(m)		5		
	Magnesium	ppm	ASTM D5185(m)		501		
	Calcium	ppm	ASTM D5185(m)		1426		
	Phosphorus	ppm	ASTM D5185(m)		707		
	Zinc	ppm	ASTM D5185(m)		836		
	Sulfur	ppm	ASTM D5185(m)		2032		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	19.1		

13.5





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02631289

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0118303

Received **Tested** Unique Number : 5772442 Test Package : MOB 1 ( Additional Tests: PQ, Visual )

Diagnosed

: 25 Apr 2024 : 26 Apr 2024

: 26 Apr 2024 - Kevin Marson

20 Brydon Drive Etobicoke, ON CA M9W 5R6 Contact: Kim McCall kmccall@gflenv.com

GFL Environmental - 225 - COT(D2)

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:

Submitted By: Kim McCall

T: