WEAR CONTAMINATION FLUID CONDITION

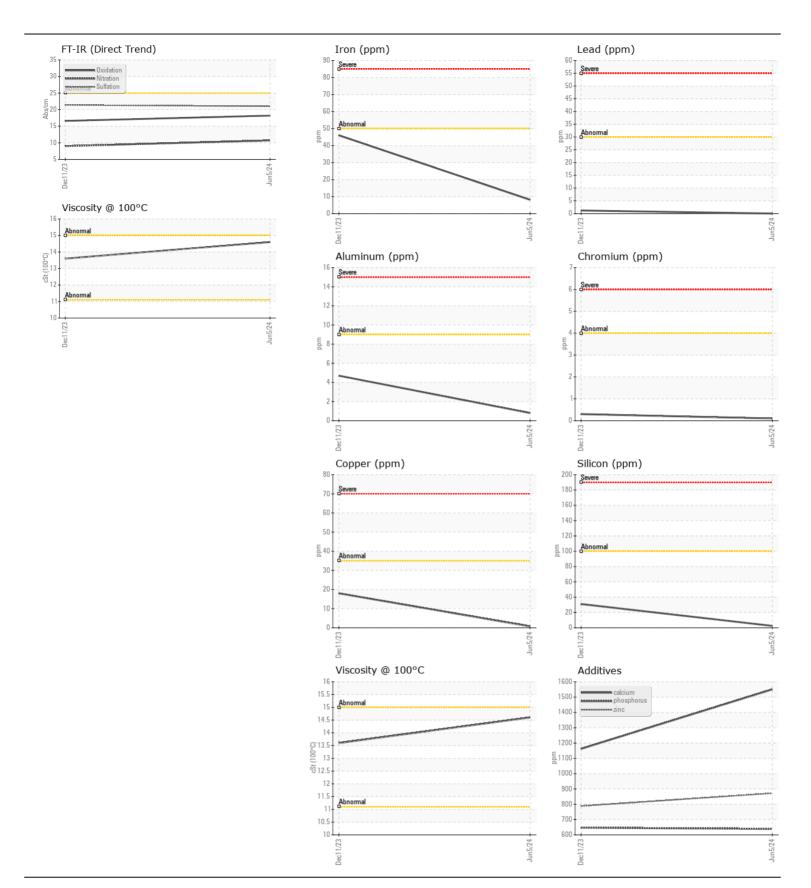
NORMAL NORMAL



GFL218
Machine Id
833031
Component
Natural Gas I

Natural Gas Engine

fluid {not provided} ( GAL)							
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0124647	GFL0104509	
	Sample Date		Client Info		05 Jun 2024	11 Dec 2023	
	Machine Age	kms	Client Info		12572	614	
	Oil Age	kms	Client Info		614	0	
	Filter Age	kms	Client Info		614	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>50	8	46	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>4	<1	<1	
	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	<1	5	
	Lead	ppm	ASTM D5185(m)	>30	0	1	
	Copper	ppm	ASTM D5185(m)	>35	<1	18	
	Tin	ppm	ASTM D5185(m)	>4	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>+100	2	31	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	2	
	Water		WC Method	>0.1	NEG	NEG	
	Soot %	%	ASTM D7844*		0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	10.7	9.0	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	21.4	
	Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		7	3	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		10	11	
	Barium	ppm	ASTM D5185(m)		0	2	
	Molybdenum	ppm	ASTM D5185(m)		51	95	
	Manganese	ppm	ASTM D5185(m)		<1	10	
	Magnesium	ppm	ASTM D5185(m)		542	529	
	Calcium	ppm	ASTM D5185(m)		1550	1162	
	Phosphorus	ppm	ASTM D5185(m)		639	647	
	Zinc	ppm	ASTM D5185(m)		872	788	
	Sulfur	ppm	ASTM D5185(m)		1923	2165	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	18.2	16.6	
	Visc @ 100°C	cSt	ASTM D7279(m)		14.6	13.6	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0124647 Lab Number : 02640430

Unique Number : 5789592 Test Package : MOB 1 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.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 07 Jun 2024 **Tested** : 07 Jun 2024

Diagnosed

: 07 Jun 2024 - Wes Davis

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

GFL Environmental - 225 - COT(D2)