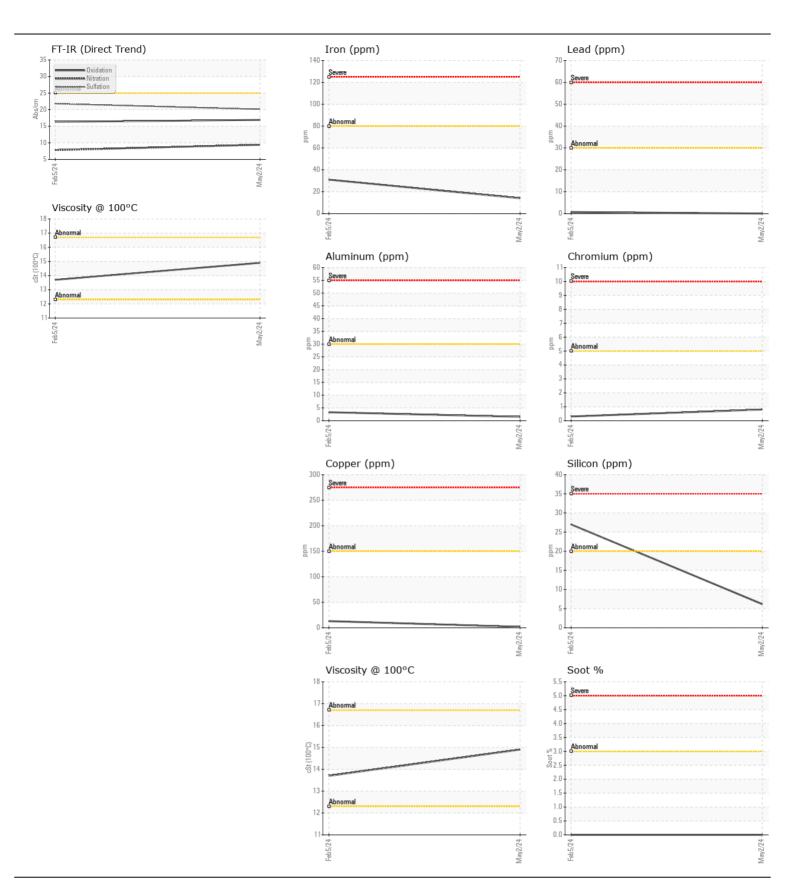
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



GFL218
Machine Id
234001
Component
Diesel Engine
Fluid
NOT GIVEN (--- GA

NOT GIVEN (GAL)					. ,		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0120085	GFL0111121	
	Sample Date		Client Info		02 May 2024	05 Feb 2024	
	Machine Age	kms	Client Info		10340	5138	
	Oil Age	kms	Client Info		5138	0	
	Filter Age	kms	Client Info		5138	0	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>80	14	31	
	Chromium	ppm	ASTM D5185(m)		<1	<1	
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185(m)		<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)	>30	2	3	
	Lead	ppm	ASTM D5185(m)	>30	0	<1	
	Copper	ppm	ASTM D5185(m)	>150	2	13	
	Tin	ppm	ASTM D5185(m)	>5	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	6	27	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	2	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	9.4	7.8	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	21.8	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		6	2	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		25	39	
	Barium	ppm	ASTM D5185(m)		<1	2	
	Molybdenum	ppm	ASTM D5185(m)		57	91	
	Manganese	ppm	ASTM D5185(m)		1	9	
	Magnesium	ppm	ASTM D5185(m)		605	624	
	Calcium	ppm	ASTM D5185(m)		1613	1297	
	Phosphorus	ppm	ASTM D5185(m)		737	704	
	Zinc	ppm	ASTM D5185(m)		925	811	
	Sulfur	ppm	ASTM D5185(m)		2048	2411	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	16.3	
	Visc @ 100°C	cSt	ASTM D7279(m)		14.9	13.7	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: GFL0120085 Lab Number : 02633461

Unique Number : 5774614 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 **Tested**

: 06 May 2024 : 06 May 2024 Diagnosed

: 06 May 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)