WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



GFL218
Machine Id
833056
Component
Natural Gas Engine

NOT GIVEN ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0120084	GFL0097017	
	Sample Date		Client Info		29 Apr 2024	18 Oct 2023	
	Machine Age	kms	Client Info		12159	4608	
	Oil Age	kms	Client Info		4608	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	10	37	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>4	0	0	
	Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	2	
	Aluminum	ppm	ASTM D5185(m)	>9	1	4	
	Lead	ppm	ASTM D5185(m)	>30	0	2	
	Copper	ppm	ASTM D5185(m)	>35	2	19	
	Tin	ppm	ASTM D5185(m)	>4	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION  There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)	>+100	3	33	
	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	11.0	8.0	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.9	21.7	
	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	NORML	
	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)		7	13	
	Barium	ppm	ASTM D5185(m)		0	3	
	Molybdenum	ppm	ASTM D5185(m)		51	92	
	Manganese	ppm	ASTM D5185(m)		<1	10	
	Magnesium	ppm	ASTM D5185(m)		548	599	
	Calcium	ppm	ASTM D5185(m)		1539	1099	
	Phosphorus	ppm	ASTM D5185(m)		617	624	
	Zinc	ppm	ASTM D5185(m)		873	708	

Sulfur Oxidation ppm ASTM D5185(m)

13.7 ---

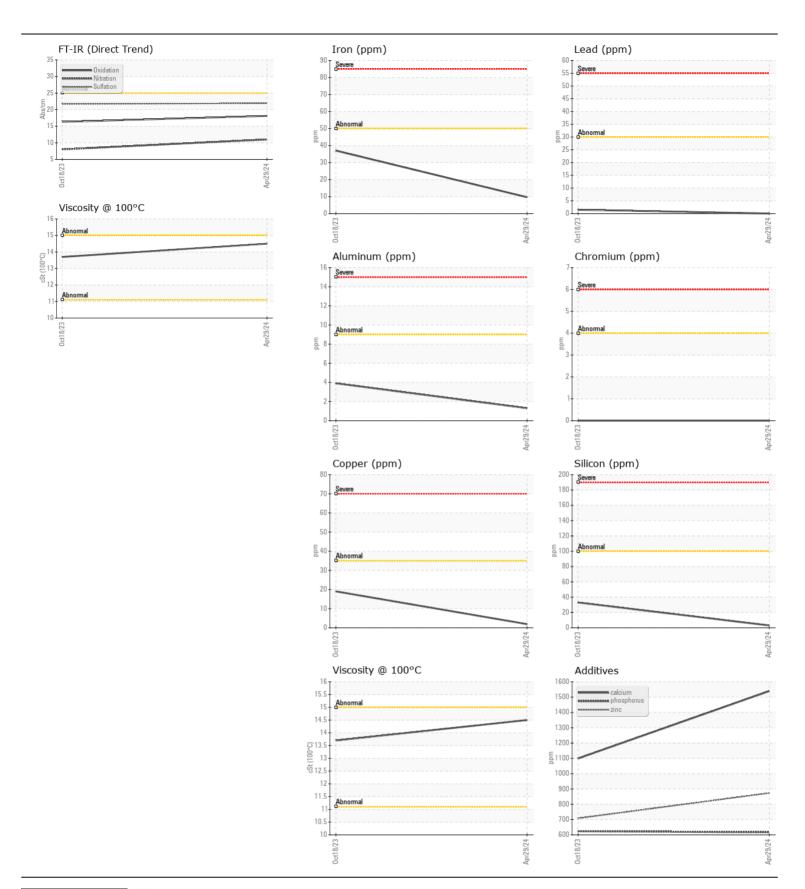
2172

16.3

1907

18.1

14.5





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02632743 Unique Number : 5773896

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0120084

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: Visual)

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.

: 02 May 2024 : 02 May 2024

: 02 May 2024 - Wes Davis

GFL Environmental - 225 - COT(D2) 20 Brydon Drive Etobicoke, ON CA M9W 5R6 Contact: Rick Philip rphilip@gflenv.com T: (416)745-8080

Report Id: GFL225 [WCAMIS] 02632743 (Generated: 05/02/2024 14:32:01) Rev: 1