WEAR CONTAMINATION FLUID CONDITION

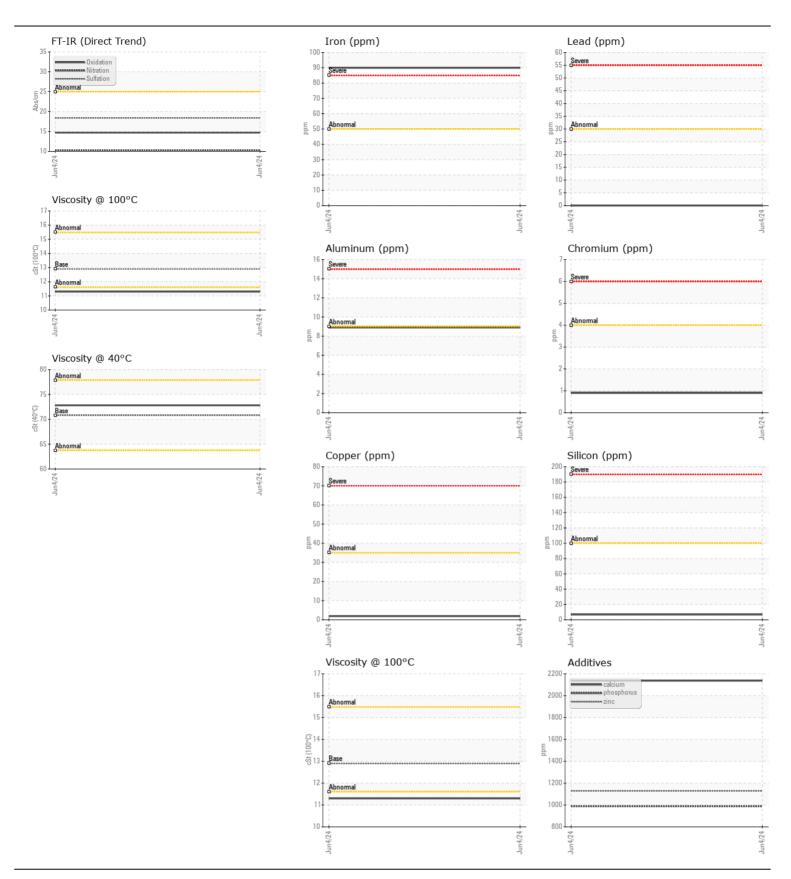
NORMAL NORMAL NORMAL

Machine Id

**219003** 

Component
Natural Gas Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The component was not specified, however we determined the component was a natural gas engine based on the type of fluid used. Please specify component type with your next sample. Resample at the next service interval to monitor.	Sample Number		Client Info	2	GFL0117125		
	Sample Date		Client Info		04 Jun 2024		
	Machine Age	hrs	Client Info		2551		
	Oil Age	hrs	Client Info		600		
	Filter Age	hrs	Client Info		600		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185(m)	>50	90		
VEAIT	Chromium	ppm	ASTM D5185(m)		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)	_	1		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)		9		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)	>35	2		
	Tin	ppm	ASTM D5185(m)	>4	0		
	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	7		
	Potassium	ppm	ASTM D5185(m)		1		
There is no indication of any contamination in the oil.	Water		WC Method		NEG		
	Soot %	%	ASTM D7844*		0.1		
	Nitration	Abs/cm	ASTM D7624*	>20	10.2		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4		
	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		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		46		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		76		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		26		
	Calcium	ppm	ASTM D5185(m)		2137		
	Phosphorus	ppm	ASTM D5185(m)		989		
	Zinc	ppm	ASTM D5185(m)		1129		
	Sulfur	ppm	ASTM D5185(m)		3065		
	Oxidation	Abs/.1mm	ASTM D7414*		14.7		
	Visc @ 40°C	cSt	ASTM D7279(m)	70.8	72.8		
	Visc @ 100°C	cSt	ASTM D7279(m)		11.3		





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 209 - Hamilton

: GFL0117125 Lab Number : 02640749 Unique Number : 5789911

Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received **Tested** Diagnosed

: 10 Jun 2024 : 11 Jun 2024

: 11 Jun 2024 - Kevin Marson

Stoney Creek, ON **CA L8E 3X7** Contact: Fred Carleton fred.carleton@gflenv.com T: (289)925-6693 F: (905)664-9008

560 Seaman Street

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.