WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

351189

Component

Gasoline Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0119020		
	Sample Date		Client Info		17 Jun 2024		
	Machine Age	kms	Client Info		4031		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
EAR	Iron	ppm	ASTM D5185(m)	>150	21		
	Chromium	ppm	ASTM D5185(m)	>20	1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)	>5	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>2	<1		
	Aluminum	ppm	ASTM D5185(m)		4		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)		20		
	Tin	ppm	ASTM D5185(m)	>10	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185(m)	~3N	21		
ONTAMINATION	Potassium	ppm	ASTM D5185(m)		<1		
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	<i>></i> 0.2	NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	10.7		
	Sulfation	Abs/.1mm	ASTM D7415*		24.1		
	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*	>0.2	NEG		
LUD CONDITION	Codium		ACTM DE10E(m)	. 400			
LUID CONDITION	Sodium	ppm	ASTM D5185(m)	>400	10		
The condition of the oil is acceptable for the time in service.	Boron Barium	ppm	ASTM D5185(m)		19		
		ppm	ASTM D5185(m) ASTM D5185(m)		0 263		
	Molybdenum	ppm					
	Manganese	ppm	ASTM D5185(m)		2 492		
	Magnesium	ppm	ASTM D5185(m)				
	Calcium	ppm	ASTM D5185(m)		1302		
	Phosphorus	ppm	ASTM D5185(m)		634		
	Zinc	ppm	ASTM D5185(m)		774		
	Sulfur	ppm Abo/1mm	ASTM D5185(m)	. 05	1660		
	Oxidation	Abs/.1mm	ASTM D7414*		19.6		
	Visc @ 40°C	cSt	ASTM D7279(m)		41.5		
	Visc @ 100°C	cSt	ASTM D7279(m)	8.3	8.0		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW : GFL0119020

Lab Number : 02643984 Unique Number : 5801523

Received : 25 Jun 2024 **Tested** Diagnosed

: 25 Jun 2024 Test Package: MOB 1 (Additional Tests: KV40, VI, Visual)

: 25 Jun 2024 - Kevin Marson

8409 -15th Street NW Edmonton, AB CA T6P 0B8 Contact: Tim Greig tgreig@gflenv.com T: (780)231-0521

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.