WEAR CONTAMINATION FLUID CONDITION

ABNORMAL NORMAL NORMAL

Machine Id

## **Mercury 1**

## Gasoline Engine

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Infra-red and other tests indicate the oil is mineral based.	Test	UOM	Method	Limit/Abn	Current	History1	History
	Sample Number		Client Info		WC0948245		
	Sample Date		Client Info		22 May 2024		
	Machine Age	kms	Client Info		114000		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR  Light concentration of visible metal present. Piston, ring and cylinder wear is indicated.	Iron	ppm	ASTM D5185(m)	>150	26		
	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		4		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>40	3		
	Lead	ppm	ASTM D5185(m)	>50	0		
	Copper	ppm	ASTM D5185(m)	>155	3		
	Tin	ppm	ASTM D5185(m)	>10	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	▲ LIGHT		
	Yellow Metal	scalar	Visual*	NONE	NONE		
Light fuel dilution occurring. No other contaminants were detected in the oil.	Silicon	ppm	ASTM D5185(m)	>30	11		
	Potassium	ppm	ASTM D5185(m)		8		
	Fuel	%	ASTM D7593*	>4.0	1.5		
	Water		WC Method	>0.2	NEG		
	Glycol	%	ASTM D7922*		0.0		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	11.1		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.5		
	Silt	scalar	Visual*	NONE	VLITE		
	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		
Viscosity of sample indicates oil is within SAE 5W20 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Sodium	ppm	ASTM D5185(m)	>400	20		
	Boron	ppm	ASTM D5185(m)		27		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		95		
	Manganese	ppm	ASTM D5185(m)		1		
	Magnesium	ppm	ASTM D5185(m)		503		
	Calcium	ppm	ASTM D5185(m)		987		
	Phosphorus		ASTM D5185(m)		614		

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ppm

Viscosity Index (VI) Scale ASTM D2270\*

ASTM D5185(m)

ASTM D7279(m)

ppm ASTM D5185(m)

718

1908

12.9

41.6

7.5





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0948245 Lab Number

: 02637614 Unique Number : 5786776

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 27 May 2024

**Tested** : 30 May 2024 Diagnosed

: 30 May 2024 - Kevin Marson

HAMILTON, ON CA L8K 1Z3 Test Package : MOB 1 ( Additional Tests: BottomAnalysis, FILTERPATCH, FuelDilution, Glycol, KV40, PercentFu@blvflact: Jeff Stegmaier jeff.st@sympatico.ca

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.

T: (905)807-7563

**JEFF STEGMAIER** 

230 CORONATION AVE

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