WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL

Machine Id

0128

Component Gasoline Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TILCOMINICIADA FICIA	Sample Number	JOIVI	Client Info	LITTU/AUT	GFL0117341		
The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.	Sample Date		Client Info		14 May 2024		
	Machine Age	kms	Client Info		332771		
	Oil Age	kms	Client Info		20863		
	Filter Age	kms	Client Info		20863		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
MEAD	lvon		ACTM DE10E(m)	. 150	00		
WEAR	Iron	ppm	ASTM D5185(m)	>150	39		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel Titanium	ppm	ASTM D5185(m) ASTM D5185(m)	>5	<1 0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)		3		
	Lead	ppm	ASTM D5185(m)	>50	0		
	Copper	ppm	ASTM D5185(m)		1		
	Tin	ppm	ASTM D5185(m)	>100	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	0.00		AOTM DEADE()				
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>30	11		
Light fuel dilution occurring. No other contaminants were detected in the oil.	Potassium Fuel	ppm o/	ASTM D5185(m)	>20	6		
	Water	%	ASTM D7593* WC Method	>4.0	1.2 NEG		
	Glycol		WC Method	>0.2	NEG		
	Soot %	%	ASTM D7844*		0		
	Nitration	Abs/cm	ASTM D7624*	>20	10.1		
	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		
FLUID CONDITION	Sodium	nnm	ASTM D5185(m)	>400	5		
	Boron	ppm ppm	ASTM D5185(III) ASTM D5185(m)		19		
The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is suitable for further service.	Barium	ppm	, ,	0	0		
	Molybdenum	ppm	ASTM D5185(m)		143		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	. ,	1160	567		
	Calcium	ppm	ASTM D5185(m)	820	1051		
	Phosphorus	ppm	ASTM D5185(m)		697		
	Zinc	ppm	ASTM D5185(m)	1260	769		
	Sulfur	ppm	ASTM D5185(m)	3000	1764		
	0	A la a / d us us	ACTM D7414*	. OF	454		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	15.1		
	Base Number (BN)			11.0	5.42		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County : GFL0117341 Lab Number : 02637857

Unique Number : 5787019

Received **Tested** Diagnosed

: 29 May 2024

: 29 May 2024 - Kevin Marson Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

: 28 May 2024

220 Carmek Blvd Rocky View County, AB **CA T1X 1X1** Contact: GFL Calgary

calgarymaintenance@gflenv.com T:

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.

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