WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

AUTO CAR 4110 Component Diesel Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
ECOMMENDATION	Sample Number	UOIVI	Client Info	LIIIII/ADN	LW0009003		History:
Resample at the next service interval to monitor.							
	Sample Date	bro	Client Info		09 Apr 2024		
	Machine Age	hrs			0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
/EAR	Iron	ppm	ASTM D5185m	>100	63		
WEAT	Chromium	ppm	ASTM D5185m		3		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	77	<1		
	Silver		ASTM D5185m	. 3	0		
	Aluminum	ppm	ASTM D5185m				
		ppm			4		
	Lead	ppm	ASTM D5185m		14		
	Copper	ppm	ASTM D5185m		5		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185m	>25	10		
Test for glycol is negative. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	41		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol	%	*ASTM D2982		0.0		
	Soot %	%	*ASTM D7844	>3	2.7		
	Nitration	Abs/cm	*ASTM D7624	>20	15.3		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	30.4		
	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		*Visual	>0.2	NEG		
<u> </u>							
LUID CONDITION	Sodium	ppm	ASTM D5185m		49		
	Boron	ppm	ASTM D5185m		13		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		104		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m		993		
	Calcium	ppm	ASTM D5185m		1323		
	Phosphorus	ppm	ASTM D5185m		1146		
	Zinc	ppm	ASTM D5185m		1280		
	Sulfur	ppm	ASTM D5185m		3209		
		Abs/.1mm	*ASTM D7414	>25	25.5		
	UNICATION				£J.J		
	Oxidation Base Number (BN)		ASTM D2896	7 _ 0	6.0		





Certificate L2367

Laboratory Sample No.

Lab Number : 06148432 Unique Number: 10978510

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : LW0009003

Received **Tested**

Diagnosed

: 15 Apr 2024 : 17 Apr 2024

: 17 Apr 2024 - Jonathan Hester

LRS - NILES 33541 REUM RD NILES, MI US 49120

Test Package: MOB 1 (Additional Tests: Glycol, TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: JOHN HUGHES johnh@michianarecyclinganddisposal.com T: (269)684-0900 X:124

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)