

**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id 1099095

Component Diesel Engine							
{not provided} ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0386624		
	Sample Date		Client Info		10 Jan 2024		
	Machine Age	hrs	Client Info		1055		
	Oil Age	hrs	Client Info		993		
	Filter Age	hrs	Client Info		993		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	51		
	Chromium	ppm	ASTM D5185m	>20	<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	3		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	17		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	nnm	ACTM DE10Em	. 25	6		
CONTAMINATION	Potassium	ppm	ASTM D5185m ASTM D5185m		6 8		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>5	<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	70.L	NEG		
	Soot %	%	*ASTM D7844	>3	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	9.7		
	Sulfation	Abs/.1mm	*ASTM D7415		20.0		
	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		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
ELUID CONDITION							
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		22		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		3		
	Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m		<1 72		
	Calcium	ppm	ASTM D5185m		2349		
	Phosphorus	ppm ppm	ASTM D5185m		1058		
	Zinc	ppm	ASTM D5185m		1183		
	Sulfur	ppm	ASTM D5185m		3858		
	Oxidation	Abs/.1mm	*ASTM D3163111	>25	14.2		
	Base Number (BN)			/20	7.4		
	Visc @ 100°C	cSt	ASTM D445		13.1		
	1.55 @ 100 0				.5.,		







Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number** 

: 06060773 : 10832155

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0386624 Recieved : 16 Jan 2024 : 17 Jan 2024 Diagnosed Diagnostician : Wes Davis

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

\* - 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)

**HUGG & HALL EQUIPMENT** 

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