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

## **INTERNATIONAL 544**

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0906020	WC0851018	
	Sample Date		Client Info		21 Feb 2024	13 Oct 2023	
	Machine Age	mls	Client Info		142542	139298	
	Oil Age	mls	Client Info		0	5000	
	Filter Age	mls	Client Info		0	5000	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	ppm	ASTM D5185m	>100	12	24	
	Chromium	ppm	ASTM D5185m		<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		9	13	
	Lead	ppm	ASTM D5185m		2	<1	
	Copper	ppm	ASTM D5185m		- <1	1	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m	7.0	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	nnm	ASTM D5185m	>25	3	Л	
CONTAININATION	Potassium	ppm	ASTM D5185m		2	4	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		< 1.0 NEG	NEG	
	Glycol		WC Method	>0.2	NEG	NEG	
	Soot %	%	*ASTM D7844	- 2	1	1.2	
	Nitration	Abs/cm	*ASTM D7624	>20	9.0	8.9	
	Sulfation	Abs/.1mm	*ASTM D7024		20.2	20.6	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
	Lindishica Water		Visuai	70.2		INLO	
LUID CONDITION	Sodium	ppm	ASTM D5185m		2	0	
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		5	11	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		57	61	
	Manganese	ppm	ASTM D5185m		<1	0	
	Magnesium	ppm	ASTM D5185m		892	822	
	Calcium	ppm	ASTM D5185m		1015	1034	
	Phosphorus	ppm	ASTM D5185m		992	883	
	Zinc	ppm	ASTM D5185m		1179	1148	
	Sulfur	ppm	ASTM D5185m		2754	3023	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	15.7	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	8.5	
	Visc @ 100°C	cSt	ASTM D445	15.6	12.8	12.7	







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0906020 Lab Number : 06100757

Received Unique Number: 10898987

**Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 27 Feb 2024 : 27 Feb 2024 - Wes Davis

: 26 Feb 2024

WAYNE CO SCHOOL BUS GARAGE 1603 SALEM CHURCH RD GOLDSBORO, NC

US 27530 Contact: BRANDON BRIGGS

brandonbriggs@wcps.org T:

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)

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