WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

518
Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0906002	WC0792763	
	Sample Date		Client Info		15 Apr 2024	24 Mar 2023	
	Machine Age	mls	Client Info		199457	5000	
	Oil Age	mls	Client Info		5000	5000	
	Filter Age	mls	Client Info		5000	5000	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Not Changd	Not Changd	
	Sample Status				NORMAL	NORMAL	
VEAR	Iron	ppm	ASTM D5185m	>100	32	23	
	Chromium	ppm	ASTM D5185m	>20	1	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		3	3	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m	>330	3	13	
	Tin	ppm	ASTM D5185m	>15	1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	11	6	
	Potassium	ppm	ASTM D5185m	>20	4	2	
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.5	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.1	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	18.5	
	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	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	<1	
	Boron	ppm	ASTM D5185m		6	18	
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	0	
	Molybdenum	ppm	ASTM D5185m		66	63	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		941	794	
	Calcium	ppm	ASTM D5185m		1174	1203	
	Phosphorus	ppm	ASTM D5185m		1110	996	
	Zinc	ppm	ASTM D5185m		1283	1205	
	Sulfur	ppm	ASTM D5185m		3422	3071	
	Oxidation	Abs/.1mm	*ASTM D7414		15.1	13.8	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.8	8.7	
	Visc @ 100°C	cSt	ASTM D445	15.6	13.8	13.3	





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0906002 Lab Number : 06155168 Unique Number : 10990591

Received **Tested** Diagnosed

: 19 Apr 2024 : 22 Apr 2024 : 22 Apr 2024 - Wes Davis

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

US 27530 Contact: BRANDON BRIGGS brandonbriggs@wcps.org

Test Package : MOB 1 (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)

T:

F: